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INTRODUCTION
TO
PLAYING FROM SCORE

RIEMANN

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INTRODUCTION

TO

PLAYING FROM SCORE

BY

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TRANSLATED FROM THE GERMAN.

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FOREIGN

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PREFACE.

By the term "Playing from Score" is meant the reproduction of a work written for a number of parts (human voices, instruments, or both) in a more or less faithful arrangement on the piano or organ. Without some kind of arrangement such a performance will be possible but in few cases. An introduction to score-playing must, therefore, elucidate clearly those principles according to which we should proceed in cases where the strict reproduction must be departed from; it must also state how to group in every case most suitably in piano form, that which lies too far apart or intermixes too closely. Playing from score is always a kind of improvisation of the piano-score.

In the reproduction of a score on the piano completeness will be aimed at in a greater or less degree, according to the practical end held in view in each case. If the object is to help the singer or the solo-instrumentalist to practise his part in such a way as to become acquainted with the working in of his solo with the orchestral accompaniment, and accustomed to its most prominent thematic formations, it is more important to emphasise the detail in the melodic outline than to faithfully preserve the colouring. Should, however, the piano-forte arrangement by itself take the place of the vocal and instrumental performance, then the task will be to present the *tout-ensemble* as nearly as possible with the resources of the piano. The greatest freedom of treatment will be allowable, when, at choir practices, it is only required to mark the main outline of the harmony distinctly. In such cases it would be not only unnecessary, but even undesirable, to pay much attention to the detail of the part-

writing from the very beginning; it is better at first merely to mark distinctly the main outlines of the harmonic development. Afterwards, but only by degrees, the thematic formations of the accompaniment itself should be added, in order that the singers may not get confused and irritated at the rehearsals with orchestra by their unexpected introduction.

Special guidance is not necessary for this voluntary departure from faithful reproduction. The principle involved will reveal itself to us sufficiently and its handling become familiar in attempting more difficult tasks. The special task of playing from score is, from the beginning and all through, rather the reproduction in the most perfect manner of the contents of the score, so as to bring out the thematic texture as well as to imitate the effects of light and shade by means of dynamic gradations, varying forms of figuration, and greater or less fulness of chords.

The comparison of a modern pianoforte score, such as Liszt first produced, aiming directly at reproducing as far as possible orchestral effects on the piano, with the piano-scores of the middle of the eighteenth century, which, like pencil-sketches, merely suggest, — *e. g.* J. Ad. Hiller's "*Raccolta*", of symphonies of the time before Haydn (J. Breitkopf's edition), which confine themselves mainly to marking melody and bass, the latter not even in double-bass, but only in cello position — may in some measure give us an idea of the great variety possible in playing from score. In judging these older piano-scores we must not forget, however, that they belong to a time which used almost exclusively the clavicembalo instead of our modern pianos. This instrument had special pedals or knee levers which brought on reinforcing octaves, and thus produced doublings similar to those produced on the organ by the use of the mutation-stops: further it is to be remembered that, in 1750, thorough-bass playing was still a common practice, and an accomplished cembalist would habitually fill up, when required, by adding middle parts, a composition noted only in two parts (melody and bass). Many a Sonata for violin or flute etc., with "*Basso continuo*" has appeared in print with the express direction "*Overo Clavicembalo Solo.*" But just as little as the accompanist of the violin or flute restricted himself to a simple playing of the bass-tones, did he rest

satisfied with playing only two parts when performing on a piano alone. He knew rather how to introduce at the right time, especially at cadential formulas, modulations etc., the requisite fulness of harmony. In quite a similar way we must understand the thin, toneless piano scores of that time. The parts which, in the full score, were assigned to other instruments for the purpose of producing fulness, and which the piano frequently could not produce in the same octave position, were left out, it being understood that the cembalist would, as he was wont, produce corresponding effects by means suitable for his instrument. This procedure had a double advantage: first the essential only was noted, and consequently there was no danger of the player's mind being diverted from it by the auxiliary, and secondly the arrangement of the latter was left to the technical skill of the performer, so that weaker players could do less, stronger, more, to interpret the intention of the composer. A piano arrangement that is written out in full will always be played as it stands.

The great value of the practice of thorough-bass playing is already evident from this preliminary consideration; even to-day, when figured bass has disappeared a hundred years from the scores of orchestral and chamber music, the routine of improvising an accompaniment has a very real significance as an altogether indispensable condition for a perfect mastery of score-playing. He who has not sufficient inventive faculty to improvise a composition in free part writing for the piano without fear or effort, will scarcely acquire mastery of score-playing otherwise than by the diligent practice of playing from figured bass. The frequent necessary alteration of orchestral forms of chord-effects and accompaniments, into forms playable on the piano is in reality the principle underlying the figured bass; and the same reason which formerly led the practical musician to the invention of the figured bass, must even to-day induce us to practise from it.

I remark, therefore, emphatically and repeatedly, that the mastery of the simple forms of thorough-bass playing, i. e. the facility in improvising a correct four-part writing in moderate tempo, is an indispensable preliminary to score-playing. The "Catechism of Thorough-Bass-Playing" leads the way to its acquirement and must, therefore, be considered as the first part of the present subject; on the

other hand practice in score playing forms the correct continuation of the exercises in accompaniment from figured bass, since the modifications and alterations of methods of accompaniments so frequently required in this kind of playing, rapidly develop extraordinary facility in a free treatment of the accompaniment, and thus lead to a degree of routine in improvisation, similar to that which was demanded of the cembalist in the eighteenth century. The careful study of thorough-bass playing and score playing, then, is, at the same time, the proper education for the artistic writing out of elaborate accompaniments founded on figured basses, which in its turn serves as the suitable training of editors, who on account of the remarkable growth of interest in the older chamber-music, in the giant literature of the seventeenth and eighteenth centuries for violin and other instruments with figured basses as well as for singing voices with figured basses, are in ever increasing demand. The independent elaboration of such accompaniments with participation of the piano in the thematic work of the solo parts, naturally forms the conclusion of this study, and is, at the same time, a very valuable practice in composition and one that brings improvement more quickly than the mere reading of complicated works. From the latter real use is to be expected only when the difficulties of these preparatory exercises have been overcome step by step.

Besides some practice in thorough-bass playing, familiarity with some peculiarities of the notation for certain instruments and, as far as playing from vocal scores is concerned, knowledge of the old clefs is a necessary condition for success in score playing. These acquirements, however, can be attained concurrently with the study of playing from score. Those educated according to my Harmony Manuals have already, by means of the four-part exercises, made themselves familiar with the old clefs as well as with the notation for transposing instruments, so that these things offer no new problem to them. The strengthening by means of upper and lower octaves which the orchestral writing so readily adds to the real parts, is also well known to them from the last harmony exercises. He who is acquainted with organ-playing, is accustomed, in a still greater degree, to understand easily unison and octave doublings as such, and

to reduce to its seldom more than four part kernel the apparently big apparatus of the many-lined orchestral score. He knows that these doublings are principally for the purpose of strength, and, therefore, are generally replaced by the dynamic signs *f*, *ff*, in the reduction to a playable arrangement for the piano. There is not, indeed, any reason for rejecting altogether real doublings, which, within limits, are possible on the piano. This remark applies especially to the method of giving additional depth to the tone-effect by means of under-octaves. To completely disregard when playing that the double-basses give the lower octaves of the cello tones, where both have the same notation, takes away from the orchestral sound an essential peculiarity, and deprives it of its proper foundation. On the other hand, the upper octaves of the melody in the uppermost part are not to be rejected in every case, with the idea perhaps that these upper octaves are sufficiently represented by the overtones, which actually accompany the tones. It will all principally depend on the instruments to which the highest positions are given. While flutes which accompany oboes and clarinets in the octave, can be ignored at any time, the omission of the upper octave will not be possible when it is assigned to the powerful tones of the first violins. In such cases it is better to speak also of the upper part as being strengthened by under-octaves, and, in case of need, to discard the under rather than the upper octave. The actual range of the harmony, its wide extension over four or five octaves, is, under circumstances, a thing that must be preserved, so that we ought rather to sacrifice fulness in the middle position than the extreme limits above and below.

Without compromise of some kind or another the reproduction of massive orchestral writing by means of a piano solo cannot be accomplished, and the exposition of the reasons for making a sacrifice, now in one direction, now in another, forms the principal subject of the instruction on score-playing, a subject which cannot be settled with a few general remarks, but necessitates consideration from case to case.

Let these preliminary remarks suffice. I do not consider it necessary to give a further reason to show that the publication of the present little volume is desirable.

He who has appreciated the "Catechism of Thorough-Bass Playing" will be glad to be able to make further use of the facilities acquired by its study. On the other hand the novice in score playing may possibly consider it desirable, at this stage, to return to a course of thorough-bass playing, when he becomes aware of his many deficiencies.

With these few prefatory remarks I send this little book on its mission.

LEIPZIG, 1902.

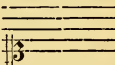
HUGO RIEMANN.

I.

THE EXACT REPRODUCTION ON THE PIANO OF COMPOSITIONS IN SEVERAL PARTS.

The pianist is so accustomed to a stereotyped outward appearance in all pianoforte music, it having been restricted, for the past hundred years, to the treble and bass clefs, that when playing from score he is confronted with a number of new elements which at first will confuse him considerably, but which have nothing to do with the special task of score playing, the making of a playable piano arrangement. Even the writing out of a composition on three or four staves presents difficulties in reading to one who has not already practised reading such notations.

The difficulty increases with the use of less familiar clefs and the transposing notation for certain instruments (clarinets, horns, trumpets) etc. All these difficulties can be overcome only by continuous practice. A careful teacher will at an early stage give his pupil opportunities to acquire facility in reading such notations by handing him older

prints of piano music, in which the soprano clef 

is used for the right hand instead of the violin clef. How Harmony exercises can be suitably so arranged that they familiarize the Student imperceptibly with every kind of notation, I have, since the publication of my "Skizze einer neuen Methode der Harmonielehre" (1880), constantly shown in my Harmony-Manuals ("Handbuch der Harmonielehre", 1888, "Vereinfachte Harmonielehre"* , 1893).

For those who have not worked according to my method, I give here some preparatory examples in progressive order, which the teacher can add to without trouble.

* English Edition: "Harmony Simplified".

Even my books on Harmony do not consider the cases where the parts are not arranged in the usual way, but where the upper part is placed under the lower, or, with three parts, one of these permutations

1, 2, 2, 3, 3,
3, 1, 3, 1, 2, is used.
2, 3, 1, 2, 1.

(1 = highest part, 3 = lowest part.)

A couple of examples will suffice to demonstrate the point in question, and may stimulate the student to seek and practise similar passages.

The following passage from Beethoven's Symphony in D (Ex. 1) shows the simple inversion of the order above to below in a two-part passage. Scores are generally so arranged that all the wind parts are placed above the string-orchestra in one, two, or three groups, each group observing an order somewhat similar to that of the choir parts:

		or (older order)
Wood Wind Instruments	$\left\{ \begin{array}{l} \text{Flutes} \\ \text{Oboes} \\ \text{Clarinets} \\ \text{Bassoons} \end{array} \right.$	Brass Instruments
		$\left\{ \begin{array}{l} \text{Kettle Drums} \\ \text{Trumpets} \\ \text{Trombones} \\ \text{Horns} \end{array} \right.$
Brass Instruments	$\left\{ \begin{array}{l} \text{Horns} \\ \text{Trumpets} \\ \text{Trombones} \\ \text{(Kettle Drums)} \end{array} \right.$	Wood Wind Instruments
		$\left\{ \begin{array}{l} \text{Flutes} \\ \text{Oboes} \\ \text{Clarinets} \\ \text{Bassoons} \end{array} \right.$
String Orchestra	$\left\{ \begin{array}{l} 1. \text{ Violin} \\ 2. \text{ Violin} \\ 3. \text{ Viola} \\ 4. \text{ Basses (Cello} \\ \quad \text{\& Double-bass)} \end{array} \right.$	String Orchestra
		$\left\{ \begin{array}{l} 1. \text{ Violin} \\ 2. \text{ Violin} \\ 3. \text{ Viola} \\ 4. \text{ Basses} \end{array} \right.$

Consequently, in a two-part composition for bassoon and violin, the bassoon part is placed above that of the violin. The pianist is, therefore, confronted by the slight difficulty of being obliged to play below what stands above, and above what stands below. The difficulty is not great. It may, however, somewhat irritate the student who is accustomed to the invariable modern notation for the piano, and cause him to try and play with crossed hands, the bassoon with the right hand and the violin with the left. Under certain circumstances this may be a good resource; here, however, it must decidedly be rejected.

BEETHOVEN. Symphony in D. (Finale.)

I.

Fagotto 1^o

V. 1^o

V. 2^o

decresc.

decresc.

p

pp

pp

pp

etc.

It is to be recommended that the transposed parallel passage (on d^7 instead of a^7) be played also. Generally speaking change of hands is to be avoided in all such cases, and the facility in disregarding the inverted position of the parts in the notation rather to be aimed at, so that one could play the above just as if it were written thus:

On this account also in the following passage for horns from the *Eroica* — where the third horn is placed on a special staff in the customary way, as a second “first” (high) horn (or perhaps, also to mark it as dispensable in case of need, when there are only two horn players available) — we must avoid playing the third horn with the left hand between the other two taken by the right hand. The proper way of playing is to give the second, lowest, horn to the left hand, and the high horns (the 1st & 3rd.), which go together in thirds and fourths almost right through, to the right hand.

Thus the following example will prove very instructive.

BEETHOVEN. *Sinfonia eroica*. (Scherzo).

The passage may in the first place be played simply as it stands, in *C* major, in order to serve the primary purpose already mentioned; then it may be made further useful in initiating the novice in this department into the system of transposing notation. According to the direction the passage is written for three horns in the pitch of *E* flat, that is to say for instruments which possess the Natural scale common to all ("natural") horns and having the intervals

4. 

(* The tone 1 is of no practical use)

not with *C*, but with *E* flat as starting note. It is to be observed, however, that the *C* of the notation represents the next lower *E* flat. Only when, in rare instances, the bassclef is employed for the lowest notes, the tones sound higher. The actual pitch, therefore, of the whole series marked in Ex. 4, is as follows:

4 a. 

It is customary to recommend the mental substitution of the bass for the treble clef for reading the horns and trumpets in *E* flat or *E*; Ex. 3, then, should be imagined as written thus:

5. 

But it must then continually be remembered that the horns sound one, and the trumpets two, octaves higher

than they appear in this method. I can therefore only once again recommend the method of reading transposing notations developed, for the first time, in my "Harmony Simplified", which settles, once for all, all kinds of transpositions, whilst, as is easily seen, the method of changing clefs demands a different clef for each pitch.

Notation	Sound (Horns)
<div style="display: flex; justify-content: space-around; align-items: center;"> 8va 8va </div>	
6.	
	<p>E (E\flat) D B (B\flat) A (A\flat) G F (F\sharp)</p> <p style="margin-left: 100px;">basso alto</p>

The use of the *F* clef on the middle line (Baritone Clef) for the reading of the notation for horns in *G*, or of the *C* clef on the second line (Mezzo Soprano Clef) for horns in *F* can scarcely be considered as an advantage, since, with the exception of the few historians who interest themselves in the vocal music of the 16th century, not many can read these clefs easily.

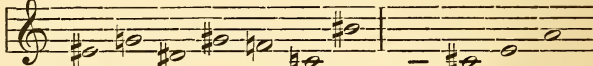
Therefore, without doubt, the other method of reading, namely that which, in perfect accordance with the principle of transposing notation, reads all notes merely as indicating intervals from *c*, just as if they were numbers, is more practical.

(a)	(b)
<div style="display: flex; justify-content: space-between;"> 7. </div>	
<p>(from c) 5^{<} 7 4^{<} 7^{<} 6^{>} 3^{>} 2^{>} 1 3 5 8</p>	

It has, moreover, the advantage of making the reader less liable to all those troublesome inaccuracies to which the change of clef exposes him, (wrong octave positions and omitted, superfluous, or wrong accidentals, \sharp , \flat or \natural).

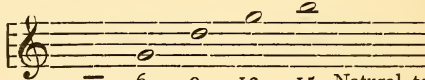
If in Ex. 7, $g\sharp$ be considered but as the sign of the raised fifth of the fundamental tone of the instrument, $f\sharp$ as the augmented fourth, and $e\flat$ as the lowered third etc., then the various pitches not only of the horns and trumpets, but also of the clarinets, cornets, tubas, the English horn and the obsolete *oboe d'amour*, *flûte d'amour* etc., are settled once for all.

For the reading of transposing notation nothing further is necessary than the clear conception of the fundamental tone of the instrument under consideration, *e. g.* for *A*-clarinet, of the fact that all notes indicate intervals from *A* (below *C*). Thus the notes of Ex. 7 assume the meaning:

8. 

(from a) 5[<] 7 4[<] 7[<] 6[>] 3[>] 2[<] 1 3 5 8

Since, generally speaking, the pitch of the instrument is chosen with due regard to the prevailing key it is not unreasonable to expect that its fundamental tone be kept before the mind. The advantage of the method is that it extends to all cases and prevents mistakes, especially those of octave-position and the meaning of accidentals. Moreover, notes such as given in Ex. 7 are comparatively rare, and group themselves easily between the 1, 3, 5, the notes of the major-chord of the fundamental tone, which are always noted as *c*, *e* and *g*. If besides these, the dominants, which are always marked *g*, *b*, and *d*,

9. 

3. 6. 9. 12. 15. Natural tone

are kept in mind, it will be easy to deal with the passages for horns in the scores of the classics, and to play, for instance, Ex. 3 (Scherzo of the "Eroica") not only in *E♭* major, but just as well in *D* major, *A* major, *F* major etc.

If the original example is to serve its purpose of instruction perfectly, and to render the insertion of others unnecessary, we must use it in many various ways. Similarly in the following examples, whenever the transposing instruments are introduced, we recommend the student to play the parts assigned to these transposing instruments also in different keys, in order to ensure facility in this method of reading.

For the purpose of practising the grouping of parts in the right position one over another, the following

passage from the *Allegretto* of Beethoven's *A* major Symphony, in which the two violins repeatedly exchange their positions, may be used.

10.

V. 1^o.

pp

V. 2^o.

sempre pp

In order to bring out clearly this crossing of parts, it is recommended to play the contrapuntal part in semi-quavers softly throughout.

In such cases the experienced player will often prefer not to play quite faithfully, but to change the accompanying part to another octave, and to preserve only the principal theme in the original position. The beginner, however, should carefully avoid this procedure, and play exactly what he has before him.

The following passage from Haydn's well known *D* major Symphony demands no change in the grouping, but only a varying distribution of the parts to the two hands.

II.

Flauto I°

Oboe

Fagotto

We insert here only this one example, and merely point out the impossibility of noting more in detail peculiarities that are of common occurrence in such works as Bach's "Forty-eight". A species of part-writing which can be played in strict accordance with the notation is not, even though the two hands may have frequently to alternate in the rendering of the middle parts, a proper object for study in a course of score-playing, but rather belongs to the study of piano playing. Even the fact that not two but three staves are employed for notation, is not without parallel in piano-literature (Schumann, Liszt). We merely point out that the above passage is to be played somewhat in the following manner:

12.

For the rest, he who finds difficulties in such a passage is earnestly recommended to study the fugues in

Bach's "Well-tempered Clavier", or, as a preparation for these, Bach's three-part Inventions. For he who is not accustomed to solve similar problems of polyphonic piano playing will, of course, fail completely, when obliged to read together parts written on single staves that, in certain cases, lie far apart.

Bach's "Art of Fugue", in the form as given in the edition of "Bach Society", or in one of the old prints (in score; in Nägeli's edition both in full score and short score), also Bach's "Forty-eight" in the Steingraber score-edition of F. Stade, serve most appropriately as preparatory exercises, all the more because the educational value of these studies is beyond question.

A few examples follow in which the change of parts and the reading of transposing notations offer but a few slight difficulties.

13. HAYDN. Symphony in E flat.

2 Corni
in E \flat

V. I^o

Clarinetti
in B \flat

V. I & 2

The horns in E \flat we know already as transposing a sixth downwards. The clarinets in B \flat (shortly called B-Clarinets) transpose only a tone downwards. In order to make himself thoroughly familiar with transposing notation, let the student play in several other keys the little passage for the horn as well as the passage for the clarinets

(*A*-clarinet [a minor third lower], *D*-clarinet [a whole tone higher], *E* flat-clarinet [a minor third higher], Alto-clarinet in *F* [a fifth lower]).

14. J. RAFF. Waldsymphonie. (Andante.) *cresc.*

Clarinetto
1º in B♭

Fagotti

Corni
in F

p

pp

poco f

p

cresc.

Here, besides the change of grouping (the horn parts are to be played in the middle), there are two kinds of transposing notations, that of the *B*-clarinets (a tone lower), and that of the *F*-horns (a fifth lower), which naturally make the reading much more difficult. To render it more easy, attention should be paid to the fact that the notes of the first horn are parallel to the highest tones of the clarinet

Solo. The example might be read in this way: the first $e \flat$ g of the horns is recognised as $\frac{5}{3} \flat$ from f , therefore as $a \flat c$, and combined with the $a \flat e \flat$ of the bassoon; the clarinet is read directly according to the intervals, in the key of $A \flat$, the starting tone being lowered a major second, the passage, therefore, beginning with e flat.

Of course, it is not possible to determine every single note of the clarinet Solo from the prime $b \flat$, as its second, third etc., we rather combine, with the necessary transposition of the starting note, a direct reading of the scale-like progression, keeping the key (A flat major) clearly in mind.

Horns are never written with any key signature in the notation used by our composers of symphonies, but every \sharp , \flat , etc., that is required must be placed beside the note. On the other hand, in the notation for clarinets, the key of the piece is indicated by the signature, here by the $2 \flat$. As is known, $2 \flat$ shift the fundamental scale a whole tone lower (B flat major instead of C major, G minor instead of A minor). Since, however, the fundamental scale of the $B \flat$ -clarinet is itself shifted a whole tone lower (C major in the notation would be B flat major), the $2 \flat$ in the signature shift the key down another tone, that is to say, from $B \flat$ major to $A \flat$ major. The student might take the following as a practical rule. The 2 flats of the fundamental key of the B -clarinet, as well as the 3 sharps of the fundamental key of the A -clarinet, must be taken into consideration along with the signature. For instance, $A \flat$ major = $2 \flat + 2 \sharp$; $G \flat$ major = $2 \flat + 4 \sharp$. F major requires only $1 \flat$, that is one less than the fundamental key of the B -clarinet; the superfluous \flat of this fundamental key, then, can be eliminated by prefixing a \sharp . In other words; if the B -clarinet plays in G major, it plays in the key of the upper fifth, that is, in our case, in F major; or: F major is the key that lies a whole tone lower than G major. Similarly E major requires, on the A -clarinet, transposition into the key of the upper fifth, *i. e.*: $1 \sharp$ must be prefixed, which together with the $3 \sharp$ of A major makes up the $4 \sharp$ of E major.

Whilst reading a part written in transposing notation, such as that of the clarinets in Ex. 14, it is desirable, for the purpose of control, to recall to one's mind now and again, especially when accidentals occur, the distance

from the fundamental tone, $B \flat$, *ex. g.*: $\sharp e$ may be identified as third of b flat, ($\sharp d$); likewise $g \flat - g \sharp$ will, as transition from the diminished to the perfect fifth of $b \flat$, give $f \flat$ and $f \sharp$ as the right notes. Raff would more correctly have written $f \sharp - g$ ($4 \leftarrow 5$) in the clarinet parts to correspond with the $b - c$ of the first horn part, or otherwise he should have written $c \flat - c$ in the horn part; but to this he probably had an objection.

15. BEETHOVEN. 9th Symphony. (Scherzo.)

2 Corni
in D

p

V. 1^o

p.

V. 2

The image displays a musical score for the Scherzo of Beethoven's 9th Symphony. It consists of three systems of music. The first system features two staves: the upper staff is for 2 Corni in D, and the lower staff is for Violin 1 (V. 1^o). The music is in 3/4 time and D major. The first measure of the horn part has a whole note chord, and the violin part has a series of eighth notes. A piano (*p*) dynamic marking is present. The second system continues the melodic lines, with a piano (*p.*) dynamic marking. The third system shows further development of the melodic lines, with a piano (*p.*) dynamic marking.

This horn passage, too, ought to be read, under supposition of other pitches (*A, B flat, B, E flat, E, F, G*), in other transpositions. This will cause no difficulty on account of the sustained fundamental note. Such easy examples will be of more use in inculcating the principle than others more involved, through which the student would have to plod his way slowly and with trouble without gaining any special lasting advantage. The violin part of this example we do not mean to be transposed. However useful that may be in itself, it has no connection with the special object of exercises in playing from score. The following passage from the first movement of Beethoven's *B flat major* Symphony contains more staves, but is otherwise a very easy example.

16.

Clarinetto 1^o in B \flat *dolce.*

Fagotto 1^o *dolce.*

V. 1^o *p*

V. 2^o *p*

Vla. *p*

Vc. e CB.

For those who are unacquainted with the alto clef (for the viola), we append here the simple means to learn to read it. The alto clef is but a *c*, which has become distorted and unrecognisable in the course of time ($\|C\|s\|\frac{3}{4}\|$) just as the violin clef is but a distorted *g* ($G\ \mathcal{G}\ \text{treble clef}$) and the bass-clef a distorted *f* ($F\ \text{bass clef}$).

The three kinds of clefs form a chain of fifths: $f\ \widehat{c},\ \widehat{c}\ \widehat{g}$; the *c* of the *C* clef is that which should be on the line missing between the top bass-line and the lowest violin-line.

16a.

If we take this line as the middle line of a five-lined staff, then the uppermost is the *g*-line, viz: that on which

the *G* clef (violin clef) should be marked, and the lowest, the *f*-line, on which the *F* clef (bass clef) should be marked.

It is wrong and altogether misleading to make a one-sided comparison between the notes of the staff of the alto clef, and those of that of the violin clef, and to see a *b* instead of the *c* shown by the clef and translate it a degree higher into *c*. He who trusts to such shifting of the meaning to learn the notes, will be obliged to wait a long time before the alto notes become directly legible to him.

The example can no longer be reproduced faithfully on the piano; at least we must partly abandon the 16' doubling (in the lower octave) of the bass which represents the double bass going with the cello. Of course such a plan will be adopted only when absolutely necessary (in bars 4—7). It would be better to mark the tones of the double bass like appoggiature by using the modern technique of rapid skips.

17.

p dolce.



But the advantage to be gained by the use of the bracketed grace-notes is not great enough to compensate for the difficulty they involve. We shall see that it suffices in such cases to mark the 16' bass now and again, and that it may even be omitted altogether for a short time without fear. In cases where a deep bass is sustained a long time it is well to recall this fact, *ex. g.* in the following passage of Mendelssohn's "Midsummer Night's Dream" Overture.

18.

A musical score for woodwinds, consisting of four staves. The top staff is for Flauti (treble clef), the second for Clarinetti in A (treble clef), the third for Fagotti (bass clef), and the bottom for Corni in E (treble clef). The key signature has three sharps (F#, C#, G#), and the time signature is common time (C). The dynamic marking *pp* is present in the Flauti and Fagotti staves. The notes are mostly sustained and grouped with slurs.

This might be reproduced on the piano by means of the pedals somewhat in the following manner:

19.

Ped.

Such a rendering must still be considered as a faithful representation, and not as an arrangement in the strict sense of the word.

The well-known coda-like horn passage from the first movement of J. Raff's "Wald" Symphony is practicable with strict observance of the text. It is a good exercise for our purpose, because of the necessity of imagining the bassoon lower, and also on account of the division on 4 or 5 staves, of which one (the viola) has the alto clef, and another (the double-bass, which does not go in octaves with the cello) is to be read an octave

lower. The reading of the horn part, indeed, is completed by interpreting the constantly repeated $c-f$ once for all as $f-b\flat$.

20.

Fagotto

Corno in F

Viola

Cello

Contra-basso

pp

pp

pp

pp

pp

Here, too, the division of the parts for the hands comes naturally to the pianist.

21.

pp

dim.

The passage of the Andante in Beethoven's Pastoral Symphony in which the singing of birds is imitated, necessitates a slight arrangement in the appended cadence.

22. (Nightingale)

Flauto
1^o

cresc.

(Quail)

Oboe
1^o

Clari-
netti
n B \flat

tr

a 2 (cuckoo)

The first system of the score consists of three staves. The top staff is in treble clef with a key signature of two flats and contains a melodic line starting with a trill (tr) on a dotted quarter note, followed by a half note and a quarter note. The middle and bottom staves are grouped by a brace on the left and contain a rhythmic accompaniment of eighth notes and chords. The bottom staff is labeled 'a 2 (cuckoo)' and features a simple two-note pattern.

Fagotti

Corni in B \flat

V. 1^o

V. 2^o

Vla.

Vc. & CB.

p

p

p

p

The second system of the score includes five orchestral parts. The Fagotti part is in bass clef and begins with a half note followed by a quarter note and a half note. The Corni in B \flat part is in treble clef and plays a sustained chord. The Violin 1 part is in treble clef and has a melodic line with a slur. The Violin 2 part is in treble clef and plays a sustained chord. The Viola part is in alto clef and plays a sustained chord. The Violoncello and Contrabasso parts are in bass clef and play a simple rhythmic pattern. The dynamic marking *p* (piano) is placed above the Fagotti staff and below the other four staves.

Piano arrangement of the final cadence:

The image shows a piano arrangement of a final cadence in 12/8 time, marked *p*. It consists of two systems of music. The first system, labeled 'a)', shows a right-hand part with a melodic line and a left-hand part with a bass line. The second system, labeled 'b)', shows an alternative right-hand part, indicated by 'or:', while the left-hand part remains the same. Both systems end with a final cadence.

In this case either the horn fifth must be sacrificed, and the octave doubling of the *e b-d* of the 2nd violins by means of the viola omitted, or the reproduction of the double-bass in the lower octave of the cello will be impossible.

Two little examples may elucidate the problem which the polyphonic composition of the 16th century with its manifold crossing of the parts involves. First a passage for three parts (2 sopranos and alto from Palestrina's five part motet "*Canite tuba in Sion*" (*Rorate coeli desuper et nubes pluant justum*).

23.

The image shows a musical score for a passage from Palestrina's five-part motet. It consists of three systems of music, each with three staves. The first system shows the beginning of the passage, with the top staff having a whole rest. The second system shows the continuation of the passage, with the top staff having a whole rest. The third system shows the end of the passage, with the top staff having a whole rest. The music is in 3/4 time and features complex polyphonic textures with many crossings between parts.

An arrangement for the piano need not be given here, but the passage should be well practised in order to incite the student to play through entire vocal compositions. Special attention should be directed to the thematic formations (cf. the bracketed phrase). It would be very mechanical and altogether unworthy of a good musician, merely to read and play the notes as they are to sound together at every moment. A real musician will rather pay constant attention to the whole thematic and harmonic construction so that the network of parts may become a most varied chain of thematic formations all full of well defined expression. The fifth volume of Ambros' Musical History or any collection of old music that the student can get, will serve as a preparation and diversify his exercises and thereby make him familiar with compositions in numerous parts. An extract from the fourth of "David's Penitential Psalms" by Orlando di Lasso may serve as a further specimen.

24.

The musical score consists of six staves. The top staff is a vocal line in G major (one sharp) and common time (C). It begins with a whole rest, followed by a phrase of notes: G4 (quarter), A4 (quarter), B4 (quarter), A4-G4 (beamed eighth notes), F4 (quarter), E4 (quarter), D4 (quarter), C4 (quarter). A slur covers the notes from G4 to F4. The lyrics "Si - cut e-" are written below the notes. The remaining five staves are piano accompaniment. The first two staves are in G major, the third is in D minor (two flats), and the last three are in G major. The piano part features a complex rhythmic pattern with many sixteenth and thirty-second notes, often beamed together. The bass line is mostly whole and half notes.

Si - cut e-

rat in — princi - pi - o et

The first system of the musical score consists of six staves. The top staff is the vocal line, with lyrics 'rat in — princi - pi - o et' written below it. The remaining five staves are for piano accompaniment, including the right hand and left hand. The music is in a key with one flat (B-flat) and a 3/4 time signature. The vocal line begins with a whole note 'rat', followed by a half rest, then a quarter note 'in', a quarter note 'princi', a quarter note 'pi', a quarter note 'o', and a half note 'et'.

nunc et sem - - - per.

The second system of the musical score consists of six staves. The top staff is the vocal line, with lyrics 'nunc et sem - - - per.' written below it. The remaining five staves are for piano accompaniment. The music continues in the same key and time signature. The vocal line begins with a whole note 'nunc', followed by a half note 'et', and then a long melisma 'sem - - - per.' consisting of a series of eighth notes.

Four cadences are here easily recognisable, the first and second in *C* minor, the third in *B* flat major, the fourth in *E* flat major. Such cadences are the principal landmarks indicating main divisions, which mean points of rest though often interrupted by the dove-tailed entry of fresh parts. The sensation of a new beginning produced by striking thematic formations thus balances the sensation of finality produced by the cadences. To this peculiarly complicated effect the performer who rightly understands his task, will pay constant attention, and thus he will acquire a deeper appreciation of the polyphonic style, which will add considerably to his own productive activity. We insert here for the purpose of simplification and control the passage brought together on two staves.

The image displays three systems of musical notation for piano, each consisting of two staves (treble and bass clef). The first system is marked with the number '25.' in the upper left. The notation is dense and polyphonic, with numerous notes, rests, and dynamic markings. The second system continues the piece with similar complexity, featuring various rhythmic patterns and rests. The third system also continues the piece, showing a mix of melodic lines and harmonic textures. The overall style is characteristic of a complex polyphonic composition.

The great difficulty of playing a polyphonic composition of more than four parts from score arises from the fact that the five, six, or more, parts all follow their own course, not like the parts of an orchestral composition, some of which are but unison or octave doublings of a smaller number of parts which really form the nucleus. Although such compositions, even when they comprise eight or more parts, seldom exceed the stretch of the two hands on the piano or organ, so that, as a matter of fact, the parts can, with few exceptions, be strictly reproduced by the player, still the perfect appreciation of their full significance is often a very difficult task. True, much that is characteristic becomes lost by reproduction on the piano or organ. For, frequent crossings of the parts, which in the choir are clearly distinguishable by the different character of the various classes of voices (Bass, Tenor, Alto, Soprano), disappear on the piano or organ in one sameness of sound. The player can of course supplement much by his imagination, and these exercises are not intended for an audience, but for the studious player himself. Therefore, he should not mind the trouble of continually practising *a capella* vocal compositions with many parts, until he has acquired such facility in comprehending both the details and the main outlines as will make his playing of these scores a source of aesthetic pleasure to himself. But while the understanding of such complicated works is, in itself, of great value to the musician who aims at higher things, still he must not forget how eminently useful the routine and rapid perception so gained will prove for other purposes. He who is familiar with the intertwining of the parts in the compositions of the Masters of polyphony can easily read the most complicated passages in modern orchestral scores; he quickly distinguishes what is merely accessory, and recognises the nucleus of the real thematic formations in the most variegated embellishments.

To conclude what is but a preparatory chapter to the real playing from score, I again call attention to the fact that the most important preparation for the exercises to be solved is the acquirement of a thorough understanding of the complications of polyphonic composition, and that, therefore, the playing of Bach's piano and organ works, as well as of older vocal compositions of all kinds in a

similar style, must form the foundation for further work. For this purpose no book is required; firm will and untiring industry alone are necessary. In comparison with the wealth of knowledge, of real artistic power, derived from that study, the whole introduction to playing from score appears scarcely more than a collection of practical and utilitarian hints on the economical use of such valuable knowledge. It deals throughout with compromises, with the insertion of substitutes barely sufficient for something more perfect, which is clearly perceived and fully appreciated, which can have its full effect only in its original shape, when performed by a large ensemble of executants, but which in playing from score must be replaced by something similar, though imperfect and sketch-like. In other words playing from score cannot lead to the comprehension of scores, it rather presupposes it.

Let us not be deterred from our purpose by this conclusion; for it certainly must not be overlooked that the playing of a score brings out the real, sensible sound, if not in its exact quality, at least in a very valuable approximation, and so stimulates and strengthens the musical imagination materially. Indeed one might say with justice that, although only what is understood can be correctly translated from score into piano sound, still such exercises strengthen and develop the understanding and enable the student to proceed with others still more difficult. Therefore, one must naturally conclude that the study of polyphonic piano and vocal music serves not so much as a preparation for initial attempts at playing from score, but is rather during this whole study the most important means for advancement.

To master simple orchestral compositions in playing from score, an elementary education in polyphonic playing is quite sufficient. But to thoroughly understand the most noble creations of the great masters, the entire training that can be derived from the polyphonic school is necessary. Thus only do I wish the reference to polyphonic literature to be understood. It is not that we can complete its study and then proceed with more difficult tasks. But it remains throughout, until the very highest ends are attained, a true Mentor. The playing of fugues and other compositions in the strict style written for the piano or organ, as well as the rendering on an instrument compo-

sitions written for voices, forms, therefore, the most important preparation for all stages of playing from score. For reasons already given, however, we must refrain from devoting more space to it in the present work by the insertion of a greater number of examples, just as we are unable to practise systematically the equally important basis, thorough-bass playing. It can only be shown here how, on the foundation of knowledge and skill acquired elsewhere, playing from score develops into the art of arranging, for a single player at the piano, music composed for a large ensemble of instruments, in a manner which often differs very much from a strict rendering of the notes as written.

II.

SIMPLE FORMS OF ARRANGEMENT.

We pass now to playing from score proper by attempting to play through connectedly on the piano a complete work written for an Ensemble. Mozart's string quartet in D major, which is easily available to every student in Payne's miniature score edition, may serve as base to this first practical attempt; in it we shall find numerous opportunities of inserting general remarks. As no transposing methods of notation of any kind are used for string instruments, the pianoforte player meets with nothing unusual except the use of the alto-clef for the viola. In some works the tenor clef is much used in solo passages for the violoncello. Instead of it, Mozart has in various places introduced the violin-clef, using it in the same sense that it is used in choir scores when employed for tenor voices, namely that the notes are written an octave higher than they sound. Those who have already been made familiar, in their harmony exercises, with such methods of notation, and have, in the same way, got accustomed to the four parts being written on separate staves, will find, as a rule, no other difficulty than the occasional inability to play with only two hands the com-

position as it is written, a difficulty which constitutes the real problem of playing from score.

As the quartet chosen is very easily understood and homophonic almost right through, the problems it contains are fairly simple and easily solved. The first eight bars (until the entry of the cello) can be quite easily played by the merest novice without even omitting or inverting a single note. If he has thoroughly grasped the meaning of the alto-clef, as explained on page 22, he will without hesitation read the note of the first four bars as *d*, because it stands right above the *c* that is firmly impressed on his mind. The teacher would do well to direct the attention of the novice again and again to the meaning of the middle line as *c*, namely the middle *c* of the piano. Those who have learned the notes on the plan set forth in my "New Pianoforte School" will easily get familiar with the idea that a five-lined staff may have several other meanings besides that of treble and bass. In bar 6, when the pupil has correctly defined the *a* of the viola from middle *c*, he can at once, without any further reflection read the following notes as a succession of seconds, *a, b, c♯, d*, (parallel in thirds to the *c♯, d, e, f♯*, of the second violin). The pupil himself will soon, indeed, find facilities of this kind when reading; but the careful teacher will save much time by drawing his attention to them, on every occasion from the beginning.

As regards bar 9, in which the principal melody hitherto played by the first violin is taken up by the viola, and the introduction of the cello adds a fourth part to the harmony, the question presents itself, whether we should adhere strictly to the notation, or allow ourselves to deviate from it in order to bring out the melody more effectively. To play it quite strictly is by no means impossible.

26.

Many objections, however, may be raised against it, for instance the very inconvenient technique in the first and last of these bars, which necessitates bringing the melody into prominence by special pressure on the melodic notes (in compositions of a homophonic character conceived for the piano, complications of this kind are very seldom met with), and again the impossibility of preserving the *legato* of the accompanying quavers. The tone repetition which in the condensed notation strikes the eye at once (1st bar $f\sharp$, 2nd bar c , 3rd bar b , 4th bar $c\sharp$ and then e) has a peculiar effect on the piano. It destroys the *legato* and brings forth a difference to the first four bars that is not intended and is not to be found in the original setting for string instruments. The first violin produces its $f\sharp a f\sharp a$ in as perfect a *legato*, as the second its $a f\sharp a f\sharp$; the absence of this effect is a decided loss. A possible remedy would be to give to the figure of the second violin the lower $f\sharp$ (which is not found on the violin).

But this method could be adopted with success in this one bar only, a corresponding inversion in the following bars would carry the tenor part below the bass, and this would disfigure the design and spoil the part-

writing. It would be better and more practical to try to substitute partially crotchets for repeated quavers.

28.

or

Yet even these attempts still involve the technique more than would be in accordance with the simplicity of the passage; for in reality it is nothing but the repetition of the beginning an octave lower. We can, therefore, easily disregard the fact that in the first and last bars the accompaniment is over the melody, and accompany right through as in the opening bars.

29.

In boldly adopting this simplification we make a rapid step in advance in the art of playing from score. For naturally such a procedure presupposes conscious discernment of what is important, essential, or merely subsidiary in the intention of the composer and in the effect. We decided that it is not the rising of the accompaniment above the melody in the ninth and twelfth bars, that is specially desired, but rather the continuance of the *legato*; that we assigned the accompaniment in bars 9—12 to only two parts instead of three, was the natural consequence of the short distance of the bass from the melody. We might have gone a step further and given the middle part the form of the second violin in bars 1—4 without fear of misinterpreting the intention of the composer.

The following bars can be rendered on the piano exactly, without any change. The fact, that in bar 14 both violin parts are placed under the melody is no longer a novelty to us; the only thing necessary is to invert the parts mentally, preserving intact the pitch as written. In bar 23 the violoncello (notated with the violin-clef) takes the lead and causes for five bars some slight difficulty in the reading.

30.

Musical score for measures 30-32. The score is in treble and bass clefs with a key signature of two sharps (F# and C#). Measure 30 features a treble clef staff with a melodic line starting on G4 and moving up to A4, B4, C5, and D5, marked with a forte *f* dynamic. The bass clef staff has a bass line starting on G2 and moving up to A2, B2, and C3, also marked with a forte *f* dynamic. Measure 31 continues the melodic and bass lines. Measure 32 concludes with a whole note chord in the treble clef staff.

Musical score for measures 33-35. The score is in treble and bass clefs with a key signature of two sharps (F# and C#). Measure 33 features a treble clef staff with a melodic line starting on G4 and moving up to A4, B4, and C5, marked with a forte *f* dynamic. The bass clef staff has a bass line starting on G2 and moving up to A2, B2, and C3, also marked with a forte *f* dynamic. Measure 34 continues the melodic and bass lines. Measure 35 concludes with a whole note chord in the treble clef staff.

The cello in the violin-clef is, as we have remarked, to be read an octave lower; it begins therefore with the same *a* as the second violin. As a matter of course the right hand takes up the cello at first, but must assign it to the left in bar 25, in order to take up the first violin. In bars 27—29, the limits of what is possible to play on the piano are exceeded; it is absolutely necessary to dispense with the high *a* in bar 27; it can be replaced, however, without any real loss, by the next lower *a*. On the other hand it would be better to dispense with the lower bass-tones in bars 30—32, so that the entire passage would stand thus:

31.

The image displays three systems of musical notation for piano, arranged in a grand staff format (treble and bass clefs). The key signature is two sharps (F# and C#). The first system includes a 'NB.' annotation above the treble staff. The second and third systems feature complex counterpoint with repeated mental inversion of parts, as indicated by the asterisks at the bottom of the third system.

The first twelve bars of the second theme about to follow require repeated mental inversion of the parts, as the melody rises several times above the accompanying parts, which form a counterpoint in thirds.

32.

V. 1^o
V. 2^o

p

Vc. *dolce*

etc.

Yet all can be played exactly, and nothing ought to be changed, since here the crossing of the parts is clearly a desired effect. Bars 44 to 47, however, cannot possibly be played as they stand, so that they are in absolute need of an arrangement. The imitation by the second violin of the motive of the first violin must, above all, be preserved throughout intact.

33.

p *f* *p*

f *p*

f *p*

f *p*

Musical score for the first system, featuring a piano with four staves. The top staff has a treble clef and a key signature of two sharps (F# and C#). It contains a series of sixteenth-note runs. The second staff has a treble clef and contains two notes marked *sf*. The third staff has a bass clef and contains two notes marked *sf*. The fourth staff has a bass clef and contains two notes marked *sf*.

Musical score for the second system, featuring a piano with four staves. The top staff has a treble clef and a key signature of two sharps. It contains a series of sixteenth-note runs. The second staff has a treble clef and contains a series of notes. The third staff has a bass clef and contains a series of notes. The fourth staff has a bass clef and contains a series of notes.

A solution satisfying all demands is scarcely possible, except by having recourse to difficult skips in order to save also the low *E* of the cello.

Musical score for the third system, starting at measure 34. It features a piano with four staves. The top staff has a treble clef and a key signature of two sharps. It contains a series of sixteenth-note runs. The second staff has a treble clef and contains a series of notes. The third staff has a bass clef and contains a series of notes. The fourth staff has a bass clef and contains a series of notes. The score ends with "etc."

This is a resource, however, that involves great difficulties for the nonpianist, and one that ought not be employed at least in simple exercises. Therefore it only remains to dispense with the low *E* for the accent on the first beat of bars 44 and 45, and to replace the *sforzando* chords, bars 46—47, by other combinations that may be easily played on the piano. In doing so it will scarcely make any difference, if the imitation is laid an octave lower, to avoid too thin a sound effect, and if a middle *e* is added to the right hand to fill up the increased distance.

35.

p *f* *p*

sf *sf*

sf

If the main principle be that the aim of playing from score is just to present orchestral writing in a form suitable for the piano, then it will be possible, without incurring the censure of irreverence, to venture such alterations at any time, always provided that the principal features of the design are not disfigured.

The appended cadences completing the first part, which follow, also require a whole series of similar easy transformations. Bars 49—54 can be performed without change, being quite suitable for the piano. On the other hand, it would be useless in bars 55—57 to harass oneself with exact rendering, somewhat in this manner:

Musical score for measure 36. The score is in G major (one sharp) and 2/4 time. It consists of two staves: a treble clef staff (upper right hand) and a bass clef staff (lower left hand). The upper right hand part begins with a wide interval of a major sixth (G4 to E5) and continues with a series of eighth notes. A bracket above the staff indicates a seven-measure phrase. The lower left hand part features a triplet of eighth notes. A dynamic marking of *f* (forte) is present. The word "etc." is written at the end of the measure.

This will always be troublesome for the performer. It fully suffices here to give the principal motive alone to the left hand, to bring into narrow position the widely separated chords of the three upper parts, as is usual in thorough-bass playing, and to indicate the shakes only in the upper part.

Musical score for measure 37. The score is in G major (one sharp) and 2/4 time. It consists of two staves: a treble clef staff (upper right hand) and a bass clef staff (lower left hand). The upper right hand part features trills (marked *tr*) over chords. The lower left hand part features a triplet of eighth notes. Dynamic markings of *f* (forte) and *p* (piano) are present. The letters "NB." (Nota Bene) are written above the final part of the lower staff.

The *piano* passage, however, at (NB.) can again be strictly preserved, without producing the effect of a change of position.

Bars 61—64 allow again a little freedom of treatment, inasmuch as the chords under the triplets can be reduced to three tones without loss, by omitting the *e* so inconvenient for the right hand, and in bar 63 both lower parts may be united in one.

38.

The musical score for Example 38 consists of two systems. The first system shows a piano part (treble clef) with a triplet of eighth notes, followed by a triplet of sixteenth notes, and then a triplet of eighth notes. The bass part (bass clef) has a whole rest followed by a triplet of eighth notes. Dynamics include *sf* and *tr*. The second system shows a piano part with a *p* dynamic and a bass part with a triplet of eighth notes. A section labeled (a) shows a simplified version of the bass part. Asterisks are used to mark specific notes in both systems.

Although the form of Ex. 38*a* presents no special difficulties, still its simplified substitute is clearly the form most usual for the piano (especially with Mozart), and here it perfectly fulfils its purpose. A slight simplification may be permitted in bar 70, namely:

39(a)

The musical score for Example 39(a) shows a piano part (treble clef) with a melodic line and a bass part (bass clef) with a rhythmic accompaniment. The piano part includes a triplet of eighth notes and a melodic phrase. The bass part has a steady eighth-note accompaniment. The score ends with "etc." in the piano part.

instead
of (b)

What leads us to this decision is not so much the impossibility of playing the original, as the perfect suitability of the simplified form in the present case. Besides, Ex. 39 *b* obscures unnecessarily the part writing in the last beat of the bar, which is not the case in quartet playing on account of the softer tone of the viola.

The first eight bars of the second part (beginning of the development, bars 78—85) can be played exactly. It may be remarked, however, that it suffices to strike the syncopated chords without sustaining them, whenever the hand is required elsewhere.

40.

It is one of the most important and useful privileges of the piano composition, that tones forcibly struck and quickly lifted can appear and be understood as being sustained. Thus, while it is not impossible to sustain the chord marked * above, there is no great need for doing so. By means of the pedal, indeed, the sound could be sustained, although the keys have been released. But it should be clearly understood that, even where this is not possible, the simple striking of the tone suffices to make player and hearer imagine it to be of longer duration, wherever the context demands it. It is this special property

of the piano, acknowledged by common consent, that renders it at all possible for it to take the place of a broad full-voiced composition.

Bars 86—93, which cannot be rendered exactly, form another problem.

41.

The contemplative repose which the accompaniment of this song diffuses by means of the sustained *g* of the viola and the *legato* arpeggios of the second violin (in quavers) and of the cello (in crotchets), ought on no account to be endangered by troublesome attempts at exact

reproduction. The piano-player must rather discover a form which will secure this reposeful mood. If we picture to ourselves the rhythmical elements of the original form of the accompaniment, we see quaver figuration (viola) combining with crotchet figuration (cello), but throughout with the characteristic resting on *g*, the tones of the *G* major chord merely moving to neighbouring notes. The harmony figured is this:

42 a.

Musical notation for example 42 a, showing a piano accompaniment in G major. The right hand (treble clef) plays a melody of quarter notes: G4, A4, B4, C5, B4, A4, G4. The left hand (bass clef) plays a quaver accompaniment: G3 (sustained), A3, B3, C4, B3, A3, G3. The key signature has one sharp (F#).

We shall, therefore, preserve this characteristic, if we combine the quaver movement and the sustained *g* of the two middle parts in the bass by means of a *g* repeated in syncopated crotchets, and join to the melody, to strengthen it (as compensation for a sustaining second violin), as much harmony as the right hand can conveniently manage.

Instead of the following which looks somewhat stiff and needlessly complicated,

42 b.

Musical notation for example 42 b, showing a bass line in G major. The notes are: G3, A3, B3, C4, B3, A3, G3, A3, B3, C4, B3, A3, G3. The rhythm is syncopated, with some notes beamed together. The key signature has one sharp (F#).

we had better use a simple quaver notation, which, being played *legatissimo*, means exactly the same thing, and besides represents a sustained *g* in the bass, thus: —

43.

Musical notation for example 43, showing a piano accompaniment in G major. The right hand (treble clef) plays a melody of quarter notes: G4, A4, B4, C5, B4, A4, G4. The left hand (bass clef) plays a quaver accompaniment: G3 (sustained), A3, B3, C4, B3, A3, G3. The key signature has one sharp (F#). The notation includes a fermata over the first G3 and a *leg. mo.* marking below the bass line.

The following bars stand in need of no arrangement. They form, however, an excellent exercise on account of the repeated changes of position. Of course one does not play

44. NB.

etc. NB.

but:

That is, it is better to give a repetition of tones to that hand which is immediately afterwards engaged in the same position, than to let the same hand perform the repetition and then quickly make risky skips.

In reality these things belong purely to the technique of piano playing, and properly speaking should not be dealt with in this treatise.

The close imitation of bar 98 can, and therefore should, be rendered exactly.

45. twice

N.B.

In bars 101—102 (at N. B.) the replacing of the sustained $e \flat$ of the second violin by $e \flat$ repeated is desirable for technical reasons. For, in any case, the $e \flat$ must be abandoned after the *Schleifer* $b \flat a g$. This, however, entails the danger of losing sight of it completely and of misunderstanding the progressions of the parts. The effect of the $e \flat$ being held on into the following bar, would then of course be entirely lost. The last bars of the development (bars 105—116), which lead back to Theme 1,

contain further combinations of thematic motives; they are, therefore, not properly homophonic, but full of contrapuntal elements demanding mature consideration, and as they cannot be played on the piano as written they offer some difficulties.

To play passages like the following:

46.

The musical score for exercise 46 consists of two staves, treble and bass clef, in a key signature of one sharp (F#). Part (a) shows a staccato step downwards in the second violin. Part (b) shows three parts ascending together in chords, with the upper part to be preserved intact.

arpeggiando, would be recommendable only, if there were reasons for keeping all the notes in their places, that is, if every part were thematic, and nothing mere filling matter. That, however, is not the case. In passage (a) it is manifest that the second violin merely joins the cello in the *staccato* step downwards. In (b) it is similarly manifest that the three parts ascend together in chords, and only the upper part is to be preserved intact. We shall therefore render the passage thus:

47.

The musical score for exercise 47 consists of two staves, treble and bass clef, in a key signature of one sharp (F#). The score includes a piano (*p*) dynamic marking and trills (*tr*) in the bass line.

The image displays three systems of musical notation for a piano arrangement. Each system consists of a grand staff with a treble and bass clef. The first system begins with a treble clef staff containing a melodic line with trills (tr) and a bass clef staff with a bass line. A bracket under the bass line is labeled "theme". The second system continues the piece with similar melodic and bass line development. The third system shows a transposition of the theme, with the treble clef staff playing a higher register of the melody and the bass clef staff providing a corresponding bass line.

The recurrence of the theme is so faithful that even the transposition beginning in bar 158 constitutes no new problem. Only bar 176 deviates somewhat from bar 61, because the triplets are given at first in the lower position of the first violin, and only gradually work up to the higher positions; therefore the first chord-accent must be given in the higher position whilst the others shift into a similar position as in bar 61.

48.

Naturally the two closing chords of the composition, their forms being determined merely by the technique of the violin, are replaced by two full chords suitable for the piano, care being taken to preserve what is essential, namely the highest and the lowest notes; therefore, instead of

only:

49.

Such chords as these, drawn across the strings, were much in favour in Mozart's time, especially in the beginning of symphonies, quartets, etc., and are written in much the same form by all the composers, namely, in the positions most easily managed. I give here together, as they come now to my hand, those occurring most frequently for the violin.

C major: G major:

50.

F major: D major:

B♭ major: A major:

E♭ major: E major: etc.

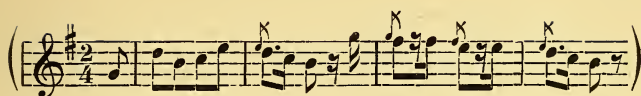
The image shows three rows of musical notation in treble clef. Each row contains two measures of music, separated by a double bar line. The first measure of each row is labeled with a chord name above it. The notes are mostly chordal in nature, with some melodic movement. The first row shows F major and D major. The second row shows B-flat major and A major. The third row shows E-flat major and E major, followed by 'etc.' indicating further progression.

The majority of these are most unsuitable for the piano, (those extending over two octaves and even further). It would be folly to wish to reproduce them faithfully in playing from score, since, in the vast majority of cases, they originate from no special artistic intention, but often enough are a modification of the composer's idea to suit the special technical requirements of the instruments. It is only right, therefore, to play such chord-accents on the piano according to pianoforte methods. Even the preservation of the highest tone is not always required. One should make sure, especially where wind instruments as well as strings are employed, whether the highest notes of the violinchords are really meant as highest notes: or whether the forms used are accidental, being found suitable for technical reasons.

We come to the „*Andante*“ of the quartet, the principal theme of which, although in a deviating species of time, shows a strong relationship to Mozart's composition on Goethe's „*Veilchen*“:

51.

The image shows a single line of musical notation in treble clef. The time signature is 3/4. The key signature has three sharps (F#, C#, G#). The notation consists of a series of eighth and sixteenth notes, some beamed together, and rests. The measure ends with a double bar line.



The first theme is assigned in octaves to the violins during thirteen bars, and under the second violin the viola accompanies in parallel thirds for eleven bars. As the cello is not far from the viola, it is easy to reproduce the composition exactly, by employing now and again skips in the left hand; the right hand can then play the octaves right through. In bar 4 the demisemiquavers should be played merely in unison.

52.



On the other hand the two-part passage of bars 16—17 is played as it stands in octaves by both hands. The bridge-passage which modulates to the Dominant presents at first a form common in piano playing, namely, a melody to be played by the right hand, and an accompaniment by the left which marks the bass on the beginning of the bar and follows it by repeated chords representing the middle parts.



This two-bar melody-phrase runs through the four parts (cello, 2nd violin, viola), and, on that account, the accompaniment changes its position; but since it can be played exactly right through, there is no necessity for an arrangement. It is necessary, however, if one adheres strictly to the position, to play the melody, when it crosses the accompaniment, somewhat more loudly in order to preserve the clearness of the design.

In bar 27 for the first time the position becomes too extended and, consequently, either the low *B* in the cello must be given up, or the second violin be assigned to a different position.

54.

The image shows two systems of musical notation. Each system consists of a grand staff with a treble clef on top and a bass clef on the bottom. The key signature is two sharps (F# and C#). The first system is labeled '54.' and shows a melody in the upper voice and accompaniment in the lower voice. The second system continues the piece, with a section labeled 'a)' in the upper voice. There are asterisks and other markings throughout the score.

The passage is an excellent exercise in mentally transposing the staves on account of the higher position being assigned repeatedly to a part notated on a lower staff; beyond this, it requires no further explanation. In bars 55—56 the sustained *e* should be placed between the two *c#*, if taken into account at all. The slight deviation occurring in bar 63 is scarcely worthy of mention.

55. *instead of:*

Only a few remarks are necessary as regards the Minuet. The initial turn is not to be played in thirds, but merely in the upper part. The $c\sharp$ of the second violin should be played an octave higher by the right hand instead of *arpeggiando* by the left.

56.

Bars 13—16 afford an opportunity to utilise our thoroughbass routine. In them the exact reproduction of the second violin is practicable only by the frequent help of the left hand. This even is difficult and useless. As the quaver-movement of the second violin only joins in that of the first, it is not essential to the rhythmical effect. Since it is also not thematic (the entire Minuet is conceived throughout homophonically), we may treat it in the same manner as the viola, merely as a middle part filling in the harmony, and place the chords at convenience between melody and bass according to the rules of four-part composition. Unconcerned by these considerable deviations, we may trust to the correctness and good effect of forms well known to us.

57.

It is not advisable to ignore the doubling of the turn in thirds in the following bars (17—23), as we did in bars 1 and 9, since it stands isolated as two-part writing (upper and lower part); it must, therefore, be played with both hands, since such rapid two-part passages for one hand are not suitable for score-playing, which is not meant for *virtuosi*. To do this, we must, however, give up the octave doubling of *g*♯ and *a*♯ from bar 21 on.

58a.

The turn in double octaves bar 32 is to be simplified again, the violins being played at first in the same tone-position as the viola, and the higher octave being added only afterwards.

58b.

A problem is presented only in the final bar, where, over the three lower parts already complete, the first violin is brought, in double stoppings, up to the *d*3. This is an effect which we should lose unwillingly; yet we cannot well preserve it otherwise than by sacrificing either the low *D* of the cello, or the viola part which goes in sixths with the second violin.

59.

either:

or:

60. Cello:

The bracketed tones may be dispensed with, and thus the accompaniment again assumes the ordinary one-part form of piano music, which we insert here for bars 9—12.

61.

stacc.

The beginning of the second part of the Trio (bars 13—20) is to be treated in the same manner (the first note of the bar in the first violin part is left out continually). In bars 22—27 the sighing figures of the first violin coming in as a kind of imitation, rather collide with the cello-melody; it is, however, better to play them as they stand, and, at the very most, transpose them upwards in bars 26—27.

62.

The transformation of bars 31—34, in which the first violin collides similarly with the accompanying figure of the viola, is a question of greater difficulty. In this case the best plan to adopt is to leave the first violin part in the original position, unless the player prefers to ignore it in the first two bars altogether.

63.

Musical score for measure 63. The score is written for two staves: a treble clef staff (top) and a bass clef staff (bottom). The key signature is one sharp (F#). The treble staff contains a melody with eighth and sixteenth notes, some beamed together, and slurs. The bass staff contains a rhythmic accompaniment with eighth notes and rests, also featuring slurs and accents. The measure ends with a fermata over the final note in both staves.

The filling tones of the second violin should, as a matter of course, be introduced in the concluding passages by means of octave-doubling of the melody: in the turn, however, this octave-doubling should be omitted.

64.

Musical score for measure 64. The score is written for two staves: a treble clef staff (top) and a bass clef staff (bottom). The key signature is one sharp (F#). The treble staff contains a melody with eighth and sixteenth notes, some beamed together, and slurs. The bass staff contains a rhythmic accompaniment with eighth notes and rests, also featuring slurs and accents. The measure ends with a fermata over the final note in both staves.

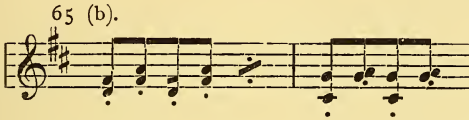
The final movement of the quartet contains many polyphonic elements, and on this account presents considerable difficulties to the player. The beginning at once assumes more of a polyphonic character on account of a counterpoint in crotchets (viola) accompanying the principal eight-bar theme (cello). Here also mental transposition of the staves is necessary, since the viola keeps below the cello. The reinforced repetition (with full cadence instead of half-cadence) requires, however, some slight

arrangement on account of the parts lying so far apart (at * the omission of the f^\sharp of the viola, which will not be missed, at ** transposition of the c^\sharp of the viola into a different octave, at *** the continuation of the scale-passage of the viola in the lower octave, at †, ††, and ††† avoidance of technical difficulties by correctly arranging the filling harmonies after the manner of thorough-bass playing).

65a.

The musical score for 65a is presented in three systems, each with a treble and bass staff. The key signature is two sharps (F# and C#). The first system shows a melodic line in the treble and a bass line with annotations: * (omission of f^\sharp), ** (transposition of c^\sharp), and † (avoidance of technical difficulties). The second system continues the melodic line and bass line, with *** (continuation of scale-passage) in the bass. The third system shows a more complex melodic line in the treble and a bass line with †† and ††† annotations.

These slight changes require no further justification. — It would be altogether contrary to the main principle of playing from score, were exact reproduction sought after on every occasion, and inconveniences created where they could be avoided without any real loss of effect. The same remarks apply also to bars 19 *seqq.*, in which the accompanying figure of the 2nd violin and the viola cannot be rigidly adhered to.



Its retention would be of no value in comparison with such an easily played substitute as

66.

The tenth at * will be rather risky, but must be ventured. The repetition of the harmony notes at ** is

advisable for the purpose of making clear part progressions which are obscured by the cello passage running through the chord.

From bars 26—27 the close imitations may cause some perplexity. It is advisable to omit the filling tones (*g*, *a*) of the second violin, as they cannot be played by either the right or the left hand without considerable difficulty; in bar 27, the *b* of the viola may very judiciously be placed an octave lower:

67.

The musical score consists of two systems. The first system is for bar 67, starting with a treble clef and a key signature of two sharps (F# and C#). The bass line begins with a forte (*f*) dynamic and includes a trill (*tr*) over a triplet. The treble line features several triplet markings. The second system is for bar 68, continuing the melodic and harmonic patterns from the first system, and ends with the word "etc." to the right of the staff.

At least, by these means, the principal motive stands out distinctly, which after all is the main point. In bar 33 the cello and viola must be united in one part, so that the bass may be distinct. The deep octaves of the cello must, indeed, be dispensed with; the lower *e* chosen at * has the advantage, over the higher one, of keeping the bass movement uninterrupted.

68.

The image shows two systems of musical notation. The first system, labeled '68.', consists of a treble clef staff and a bass clef staff. The treble staff contains a melodic line with a slur over the first two measures and a fermata over the final note. The bass staff contains a piano accompaniment marked with a 'p' dynamic, featuring a steady eighth-note pattern. The second system, labeled '69.', also consists of a treble and bass clef staff. The treble staff has a trill 'tr' over a note in the second measure. The bass staff has an asterisk '*' above a note in the second measure. Both systems include slurs and dynamic markings.

The demands of bars 40 *seqq.* assume formidable proportions on account of a sequence-like double *stretto*, in which the two violins preserve the principal motive at the distance of only half a bar, while viola and cello, at a bar's distance, play sportively with a *staccato* quaver motive. Here we must not attempt too much, but first of all replace the upward soaring sixths by thirds which step down, and also sacrifice the concluding octave skips of the two lower parts. Still we can give a fair idea of the passage on the piano in this manner:

69.

The image shows a single system of musical notation for measure 69. It consists of a treble clef staff and a bass clef staff. The treble staff contains a melodic line with a slur over the first two measures and a fermata over the final note. The bass staff contains a piano accompaniment marked with an 'sf' dynamic, featuring a steady eighth-note pattern. The system includes slurs and dynamic markings.

5*

The four-fold *stretto* of the principal motive and its inversion bars 46—49 is possible on the piano only by a complete change of the order of all the parts, which the player cannot possibly find *a vista*.

Since, as we said, this resource is to be found out only by various trials, the retention of the two outer

parts with plain harmonies for the inner parts must suffice in similar cases, as for instance:

71.

etc.

Detailed description: This musical example, labeled '71.', consists of two staves. The upper staff is in treble clef and contains a series of chords and melodic fragments, some with slurs. The lower staff is in bass clef and contains a more rhythmic accompaniment with slurs. The key signature has two sharps (F# and C#). The notation includes various note values and rests, with some notes beamed together.

Thus we have adopted again the method of freest treatment, which will be absolutely necessary for the continuation.

Only two parts are in reality essential in bars 52—56. The third and, from bar 54, also the fourth are only filling, and, as they keep within the range covered by the upper part, it will be best to take notice of them only in so far as can be done without confusion, otherwise to ignore them.

72.

Detailed description: This musical example, labeled '72.', is divided into two systems. Each system has a treble staff and a bass staff. The upper staff in both systems contains complex melodic lines with many slurs and ties. The lower staff contains chords and rhythmic accompaniment. The key signature has two sharps. The notation is dense, with many notes and rests, and includes various musical symbols like slurs, ties, and accents.

It would be quite possible to preserve the quaver movement of the middle parts at the close; but, as the shake gives sufficient fulness, it is quite superfluous to preserve the quaver movement.

Bar 54 affords an example of how even a very simple composition in three parts can be quite unplayable on the piano (neither above nor below are two parts in sufficient proximity for one hand). The sound effect of the original will be best attained by leaving both upper parts in their positions, and by indicating the bass in its original position at the beginning of the bar, and transposing it an octave higher for the rest. In bars 60 to 61 the right hand must also play the 2nd violin, which is to be transposed to the higher octave.

In bars 67 *segg*, it is advisable to give the chords to the left hand alone,

and to preserve the semiquavers of the 1st and 2nd violins fully in the first violin alone, suppressing the second semiquavers in the second violin.

Thus we have shown approximately how the closing movement may be managed on the piano. All further

difficulties that present themselves must be solved by analogy with what has been said. The octave passages of the cello and the viola in bars 81 *seqq.* are, as a matter of course, not played, but only either the cello or the viola part, the melody, however, as in Fig. 65. In bars 107 and 111 the chords may be made playable by raising the bass or lowering the viola, or, in the latter case, by continuing the viola in the lower position. In bars 114 *seqq.* the *arpeggio technique* must necessarily be employed, if the imitation is at all to be preserved. The difficulty is not very great, as it is a matter only of tenths in slow movement. The entire passage up to bar 126, where again all difficulties disappear, can then be rendered exactly. It is not, indeed, easy to play the passage, yet this is less on account of the skips of tenths, than of the continued triplet figuration. It is not necessary to write out the passage, since there is absolutely nothing to be arranged, and only a few notes (the shakes of the viola, bars 121 and 123) are to be mentally transposed (to be played with the right hand, below the violins, as they are written). The most appropriate way to render bars 169 *seqq.* playable is to give up the upper semiquaver movement, and, in its stead, to change the lower movement in such a way that, instead of the first single tone, a third will be played at once, and the sixth struck afterwards. This, indeed, is rather free treatment, but it serves its purpose and renders the omission tolerable.

76.

The musical score for Figure 76 consists of two staves. The top staff is in treble clef with a key signature of two sharps (F# and C#). It contains a melodic line with a slur over the first four notes and a fermata over the last two. The bottom staff is in bass clef with the same key signature, containing a complex rhythmic pattern of eighth and sixteenth notes with various accidentals.

First system of musical notation, consisting of a treble and bass staff. The treble staff contains a melodic line with several notes beamed together. The bass staff contains a complex accompaniment with many notes, some beamed together, and some marked with a '7' (likely indicating a seventh). A large brace spans both staves.

Second system of musical notation, consisting of a treble and bass staff. The treble staff has a few notes, followed by a series of chords. The bass staff has a melodic line with some chords. A dynamic marking 'p' (piano) is placed between the staves. A large brace spans both staves.

Third system of musical notation, consisting of a treble and bass staff. The treble staff has a complex melodic line with many notes, some beamed together. The bass staff has a simpler melodic line. A dynamic marking 'etc.' is placed at the end of the treble staff. A large brace spans both staves.

The following, up to bar 190, can be rendered faithfully by making use of a few skips of a tenth (*e. g.* bar 183 for *d-f* \sharp). It necessitates, however, a continual change of the grouping. This passage forms an excellent exercise. Bars 191—200 require, on the other hand, entire remodelling, so that the melody in the upper part, as well as the triplets of the cello and viola, may be retained exactly, though only in the form of one continuous part;

the right hand giving, in syncopated fashion, as well as possible, the harmonic completion after the manner of thorough-bass playing.

77.

The first system of music for exercise 77. The right hand (treble clef) plays a syncopated harmonic line with notes G4, A4, B4, C5, D5, E5, F5, G5, A5, B5, C6, D6, E6, F6, G6, A6, B6, C7, D7, E7, F7, G7, A7, B7, C8, D8, E8, F8, G8, A8, B8, C9, D9, E9, F9, G9, A9, B9, C10, D10, E10, F10, G10, A10, B10, C11, D11, E11, F11, G11, A11, B11, C12, D12, E12, F12, G12, A12, B12, C13, D13, E13, F13, G13, A13, B13, C14, D14, E14, F14, G14, A14, B14, C15, D15, E15, F15, G15, A15, B15, C16, D16, E16, F16, G16, A16, B16, C17, D17, E17, F17, G17, A17, B17, C18, D18, E18, F18, G18, A18, B18, C19, D19, E19, F19, G19, A19, B19, C20, D20, E20, F20, G20, A20, B20, C21, D21, E21, F21, G21, A21, B21, C22, D22, E22, F22, G22, A22, B22, C23, D23, E23, F23, G23, A23, B23, C24, D24, E24, F24, G24, A24, B24, C25, D25, E25, F25, G25, A25, B25, C26, D26, E26, F26, G26, A26, B26, C27, D27, E27, F27, G27, A27, B27, C28, D28, E28, F28, G28, A28, B28, C29, D29, E29, F29, G29, A29, B29, C30, D30, E30, F30, G30, A30, B30, C31, D31, E31, F31, G31, A31, B31, C32, D32, E32, F32, G32, A32, B32, C33, D33, E33, F33, G33, A33, B33, C34, D34, E34, F34, G34, A34, B34, C35, D35, E35, F35, G35, A35, B35, C36, D36, E36, F36, G36, A36, B36, C37, D37, E37, F37, G37, A37, B37, C38, D38, E38, F38, G38, A38, B38, C39, D39, E39, F39, G39, A39, B39, C40, D40, E40, F40, G40, A40, B40, C41, D41, E41, F41, G41, A41, B41, C42, D42, E42, F42, G42, A42, B42, C43, D43, E43, F43, G43, A43, B43, C44, D44, E44, F44, G44, A44, B44, C45, D45, E45, F45, G45, A45, B45, C46, D46, E46, F46, G46, A46, B46, C47, D47, E47, F47, G47, A47, B47, C48, D48, E48, F48, G48, A48, B48, C49, D49, E49, F49, G49, A49, B49, C50, D50, E50, F50, G50, A50, B50, C51, D51, E51, F51, G51, A51, B51, C52, D52, E52, F52, G52, A52, B52, C53, D53, E53, F53, G53, A53, B53, C54, D54, E54, F54, G54, A54, B54, C55, D55, E55, F55, G55, A55, B55, C56, D56, E56, F56, G56, A56, B56, C57, D57, E57, F57, G57, A57, B57, C58, D58, E58, F58, G58, A58, B58, C59, D59, E59, F59, G59, A59, B59, C60, D60, E60, F60, G60, A60, B60, C61, D61, E61, F61, G61, A61, B61, C62, D62, E62, F62, G62, A62, B62, C63, D63, E63, F63, G63, A63, B63, C64, D64, E64, F64, G64, A64, B64, C65, D65, E65, F65, G65, A65, B65, C66, D66, E66, F66, G66, A66, B66, C67, D67, E67, F67, G67, A67, B67, C68, D68, E68, F68, G68, A68, B68, C69, D69, E69, F69, G69, A69, B69, C70, D70, E70, F70, G70, A70, B70, C71, D71, E71, F71, G71, A71, B71, C72, D72, E72, F72, G72, A72, B72, C73, D73, E73, F73, G73, A73, B73, C74, D74, E74, F74, G74, A74, B74, C75, D75, E75, F75, G75, A75, B75, C76, D76, E76, F76, G76, A76, B76, C77, D77, E77, F77, G77, A77, B77, C78, D78, E78, F78, G78, A78, B78, C79, D79, E79, F79, G79, A79, B79, C80, D80, E80, F80, G80, A80, B80, C81, D81, E81, F81, G81, A81, B81, C82, D82, E82, F82, G82, A82, B82, C83, D83, E83, F83, G83, A83, B83, C84, D84, E84, F84, G84, A84, B84, C85, D85, E85, F85, G85, A85, B85, C86, D86, E86, F86, G86, A86, B86, C87, D87, E87, F87, G87, A87, B87, C88, D88, E88, F88, G88, A88, B88, C89, D89, 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Of the remainder of the Coda, only the last eight bars require a simple arrangement:

78.

First system of musical notation. Treble clef, key signature of two sharps (F# and C#). Measure 78 starts with a *b2* dynamic marking. A slur covers measures 78 and 79. The bass clef part has a *cresc.* marking. The music consists of chords and melodic lines in both staves.

Second system of musical notation. Treble clef, key signature of two sharps. Measure 80 starts with a *f* dynamic marking. A slur covers measures 80 and 81. The bass clef part has a *f* marking. The music consists of chords and melodic lines in both staves.

Third system of musical notation. Treble clef, key signature of two sharps. Measure 82 starts with a *3* (triple) marking. A slur covers measures 82 and 83. The bass clef part has a *dim.* marking. The music consists of chords and melodic lines in both staves.

The image shows a musical score for a quartet, consisting of two staves: a treble clef staff on top and a bass clef staff on the bottom. The key signature is one sharp (F#) and the time signature is 3/4. The music is written in a complex, rhythmic style. The treble staff features a melodic line with eighth and sixteenth notes, often beamed together, and includes a fermata over a final chord. The bass staff provides a harmonic accompaniment with chords and moving lines. Dynamics include a forte (*ff*) marking. The score is enclosed in a large brace on the left side.

The quartet has brought us forward considerably. Even complicated orchestral works seldom present more involved problems than the various *stretto* passages of the last movement. In any case we have learned how to proceed, when the production of the entire thematic web was impossible, and how to omit what can be dispensed with in any way. The student of score-playing is, then, earnestly recommended not to content himself with playing through this one quartet, but also to study others as they come under his notice. Once he has learned to manage quartets, he has mastered the most difficult part of the art. Our succeeding remarks are scarcely more educational, but they are certainly more interesting, and, therefore, entice us only too easily and too soon from the playing of quartets.

III.

SUBSTITUTES FOR ORCHESTRAL
EFFECTS.

The writing for a greater ensemble, an orchestra, is as a rule less involved than that for a string quartet. Notwithstanding the frequent combination of pairs of instruments (2 flutes, 2 oboes, 2 clarinets, 2 bassoons, 2 trumpets, 2 horns, 2 or 3 trombones) on one staff, the number of staves to be read simultaneously is, indeed, usually greater than four; since, however, many parts are only octave or unison doublings (simplified or exact) of others, the large number of apparent parts is reduced to a small number of real parts, which often does not even reach four, and but seldom is more than four. Octave-doubling, which played a fairly important part in the Mozart quartet which we have gone through, is, strictly speaking not suitable for quartets, and is but seldom used; it is all the more frequent in the orchestra, in fact it is characteristic of orchestral composition. Since octaves are only even-numbered upper tones strengthened (see „Catechism of Acoustics” p. 98), they may be replaced in score playing by a stronger touch. In other words, the discovery of the real parts, which are frequently strengthened by means of others, is a leading principle in the playing of a complete orchestral score. At the same time this principle must not be pushed too far. It would not at all be sufficient to represent a *unisono* of the whole orchestra by the tone of the double-bass position only, though played as strongly as possible. For, by doing so, the different tone colours which are combined in the *Tutti* would disappear completely. The tone colour depends, however, to a great extent on the real pitch of the tones produced; and the colour-effects of, for example, the horn can be particularly well imitated on the piano in the small and once-marked octave, those of the clarinet in the once-marked, those of the oboe in the twice-marked, and those of the flute in the thrice-marked octave; and the effect

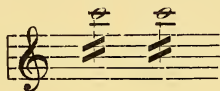
of the complete orchestra cannot be produced on the piano otherwise than by playing the high tones along with the low ones, notwithstanding the fact that these high tones are already produced as overtones. Therefore, an orchestral effect can be brought out on the piano better by four than by two hands, because four hands can play simultaneously all the notes within the entire range of the orchestra.

It is evident that the real orchestral sound cannot be produced on the piano, and much devolves on the musical imagination to vivify the colours from remembrance, just as the optical imagination paints a one-coloured, or a black and white, picture. Besides, the sensitive pianist knows how to assimilate in various ways, by means of the touch, the sounds of the piano to that of various instruments, so that the illusion of hearing horns, bassoons, or trumpets is materially strengthened; this possibility is particularly important for solo passages. Yet we do not wish to confine the task of score-playing to such a refined working out of the colours of the orchestra, we maintain rather that score-playing undertakes to give not a perfect equivalent, but only a substitute for the orchestra, and that, in the first place, it serves the purpose of making the reading of an orchestral score more beneficial by giving the sensible tone effect, and thereby making it more easy to enter into the details of the construction.

Score playing is for the reader of the score, not for the auditor who does not know the score; therefore, we need pay no heed to the various little omissions necessary in cases where it is impossible to accomplish with two hands what is notated for ten, twelve, or more different parts. He who reads the score while it is being played, and more particularly the score player himself, can see all that is meant to be represented by what he hears, and he willingly fills in that which must needs be left out.

If we now try to apply the experience and knowledge we have already acquired, to an extract of an orchestral composition, we must remember, that there are, as a matter of course, a large number of players for the string instruments, and that, therefore, the quick repetition of the same tone (*Tremolo*) causes a bright lively whizzing, which is produced to a great extent by the accompanying noise of the bows on the strings. The effect of such *tremolo* would

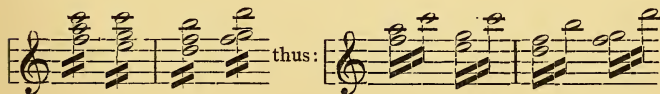
be very poorly represented by substituting a sustained tone for the repeated one. A peculiar treatment, therefore, will be required *e. g.* for a



produced by the violins in a whizzing manner, which cannot be at all adequately represented either by a simply sustained tone, or by a repeated one (which, moreover, would present a technical difficulty). The proper thing to do in such a case is to use an octave *tremolo*, in other words to add a lower or higher *c*, not contained in the notation.



Notwithstanding the strong overtones of the violin, the addition of the lower octave is to be preferred for the reason already much emphasised, that it is desirable to keep within the actual limits of pitch. The opposite rule is to be, as a matter of course, observed for a *tremolo* in the bass, that is, the upper and not the lower octave should be joined with a *tremolo* cello tone; otherwise it would appear as if the double-bass played the lower octave. *Tremolo* chords are played, of course, in the manner most convenient for the piano, which will represent the notation very well; for example for



It is better to use the lower than the higher octave to reproduce the roll, and generally quick repetitions, on

Franz Xaver Richter, Op. 4 III, Symphony in C (opening).
79, *Allegro spiritoso*.

The musical score is arranged in two systems. The first system includes staves for Corni in C, Oboi, and strings. The Oboi part begins with a melodic line marked *p*, while the strings play a rhythmic accompaniment marked *poc. f*. The second system continues the piece, featuring a more active string part with triplets and a dynamic of *f*. The score concludes with a *col. 10* marking and a final measure marked with a *5*.

Musical score for piano and orchestra, featuring various dynamics and articulations. The score is divided into two systems.

System 1:

- Violin I:** *dolce* (top), *p* (middle), *dolce* (bottom).
- Violin II:** *p* (middle), *dolce* (bottom).
- Viola:** *p* (middle), *mf* (bottom), *ten.* (bottom).
- Cello:** *col. 1^o* (middle), *col. 1^o* (middle), *mf* (bottom), *ten.* (bottom).
- Bass:** *p* (middle), *mf* (bottom).

System 2:

- Violin I:** *crescendo* (bottom).
- Violin II:** *crescendo* (bottom).
- Viola:** *crescendo* (bottom).
- Cello:** *crescendo* (bottom).
- Bass:** *crescendo* (bottom).

The musical score is arranged in two systems, each containing six staves. The first system includes a grand staff (treble and bass clefs) and four individual staves. The second system includes a grand staff and three individual staves. The score features various dynamic markings such as *al*, *f*, *p*, and *col. 1^o*. Performance instructions like *col. 1^o* and *15* are also present. The notation includes notes, rests, and slurs across all staves.

The first system of music consists of six staves. The top staff is a treble clef with a whole note chord. The second staff is a treble clef with a long, sustained chord. The third staff is a treble clef with a melodic line of eighth notes. The fourth staff is a treble clef with a melodic line of eighth notes. The fifth staff is an alto clef with a melodic line of eighth notes. The sixth staff is a bass clef with a melodic line of eighth notes.

20

The second system of music consists of six staves. The top staff is a treble clef with a whole note chord. The second staff is a treble clef with a melodic line of eighth notes. The third staff is a treble clef with a melodic line of eighth notes. The fourth staff is a treble clef with a melodic line of eighth notes. The fifth staff is an alto clef with a melodic line of eighth notes. The sixth staff is a bass clef with a melodic line of eighth notes.

System 1: A six-staff musical score. The top staff is a treble clef with a whole rest. The second staff is a treble clef with a key signature of one sharp (F#) and a whole note chord. The third staff is a treble clef with a melodic line of eighth notes. The fourth staff is a treble clef with a melodic line of eighth notes. The fifth staff is a bass clef with a melodic line of eighth notes. The sixth staff is a bass clef with a melodic line of eighth notes.

System 2: A six-staff musical score. The top staff is a treble clef with a dynamic marking of *f* and a long note. The second staff is a treble clef with a long note. The third staff is a treble clef with a melodic line of eighth notes. The fourth staff is a treble clef with a melodic line of eighth notes. The fifth staff is a bass clef with a melodic line of eighth notes. The sixth staff is a bass clef with a melodic line of eighth notes.

The first system of music consists of five staves. The top staff is a treble clef with a forte (*f*) dynamic, featuring a long, sustained note with a slur. The second staff is a treble clef with a forte (*f*) dynamic, featuring a long, sustained note with a slur. The third staff is a treble clef with a forte (*f*) dynamic, featuring a series of eighth notes with a slur. The fourth staff is a treble clef with a forte (*f*) dynamic, featuring a series of eighth notes with a slur. The fifth staff is a bass clef with a forte (*f*) dynamic, featuring a series of eighth notes with a slur.

The second system of music consists of five staves. The top staff is a treble clef with a forte (*f*) dynamic, featuring a long, sustained note with a slur. The second staff is a treble clef with a piano (*p*) dynamic, featuring a long, sustained note with a slur, and a *Soli.* marking. The third staff is a treble clef with a forte (*f*) dynamic, featuring a series of eighth notes with a slur. The fourth staff is a treble clef with a piano (*p*) dynamic, featuring a series of eighth notes with a slur. The fifth staff is a bass clef with a piano (*p*) dynamic, featuring a series of eighth notes with a slur.

Musical score for measures 37-40. The score consists of six staves. The top staff is a treble clef with a whole rest. The second staff is a treble clef with chords and a melodic line. The third and fourth staves are treble clefs with piano (*p*) dynamics, featuring a rhythmic pattern of eighth notes. The fifth staff is a bass clef with a whole rest. The sixth staff is a bass clef with a whole rest. The number 40 is printed at the bottom right of the score.

Musical score for measures 41-44. The score consists of six staves. The top staff is a treble clef with a forte (*f*) dynamic, featuring a melodic line. The second staff is a treble clef with a whole rest. The third staff is a treble clef with a forte (*f*) dynamic, featuring a melodic line. The fourth staff is a treble clef with a forte (*f*) dynamic, featuring a melodic line. The fifth staff is a bass clef with a forte (*f*) dynamic, featuring a melodic line. The sixth staff is a bass clef with a forte (*f*) dynamic, featuring a melodic line.

System 1: A set of six staves. The top two staves are grand staves with treble clefs, containing whole rests. The third staff is a treble clef staff with a melodic line featuring eighth and sixteenth notes, including a sharp sign. The fourth staff is a treble clef staff with a chordal accompaniment. The fifth staff is a bass clef staff with a rhythmic accompaniment of eighth notes. The sixth staff is a bass clef staff with a rhythmic accompaniment of eighth notes.

System 2: A set of six staves. The top two staves are grand staves with treble clefs, containing whole rests. The third staff is a treble clef staff with a melodic line featuring eighth and sixteenth notes. The fourth staff is a treble clef staff with a chordal accompaniment, including the text *col. 1^o*. The fifth staff is a bass clef staff with a rhythmic accompaniment of eighth notes. The sixth staff is a bass clef staff with a rhythmic accompaniment of eighth notes.

The image shows a musical score for piano, consisting of two systems of six staves each. The notation includes various musical symbols such as notes, rests, and ornaments. The first system features a trill (tr) in the second staff and a 'col. 1^o' marking in the fourth staff. The second system includes an 'a 2' marking in the second staff and another 'col. 1^o' marking in the fourth staff. The score is written in a key with one sharp (F#) and a 3/4 time signature. The page number '50' is located at the bottom center.

The image shows a musical score for six staves, arranged in three pairs. The top pair consists of two treble clef staves. The middle pair consists of two treble clef staves, with the second staff containing the dynamic marking "col. 1°" in two measures. The bottom pair consists of a treble clef staff and a bass clef staff. The music is written in a common time signature and features various rhythmic patterns, including eighth and sixteenth notes, and rests. The score is divided into measures by vertical bar lines, with repeat signs at the end of each line.

Here the introductory bars give occasion to mention another liberty in playing from score. On account of the separation of the two violins and of the greater brilliancy of the first violins, the alternation of the *C* major *arpeggio* between the first and the second violins does not give by any means the impression of playing in the same position, but rather, like a change between oboe, clarinet, flute, and violin in the same position, produces a different effect by means of different colours. We may, therefore, transpose the part of the second violin an octave lower. This also brings us naturally to the lower octave required in the *tremolo*. By changing the form of the *tremolo* (bar 4) we preserve the further descending of the violins, and still add that increased brilliancy to the upper-part rendered necessary by the addition of horns and oboes. For the basses we place the accented notes in double-bass position. For the Schleifer (bar 5) we naturally avoid the performance in octaves by the same hand.

80. .

p *cresc.*

f

sf

sf

Since the horns are in *C*, they do not transpose, but, of course, sound an octave lower than notated. Besides, they have throughout, like the oboes, only tones already contained in the string composition, and, therefore, have only a strengthening effect (*are di rinforza*). Their re-entry explains the *ff* in the seventh bar. The next passage requires some consideration. The long sustained octave ^{*c*}_{*c*} of the horns lies within the range encompassed by the strings, and with it, therefore, can conveniently be brought out by means of *tremolos*. The sustained thirds of the oboes may be omitted to ensure the clear presentation of the melodic passage of the first violins. This can be done without great loss, since the first oboe merely strengthens the viola in the upper octave. Tones higher than those of the first violin do not occur at first; we are in the position, therefore, to produce the double-basses and celli exactly in the notated position, and, generally, to play the whole passage exactly as written until bar 12, where the sudden rise of the violins renders the composition unplayable, and necessitates an arrangement after the manner of thorough-bass playing. We now raise the tones of the viola along with the violins, and continue forming *tremolos*, using other tones of the harmony as we require them.

81.

The musical score consists of two staves. The upper staff is in treble clef and contains a melodic line of eighth notes, with a large bracket above it spanning the entire passage. The lower staff is in bass clef and contains a bass line of eighth notes. The dynamic marking *mf* is placed below the first staff, and *cres* followed by three dashes is placed below the second staff.

cen - - - do al

f

p *f*

etc.

It would be in vain to try to reproduce exactly the next six bars (19—24), on account of the difficulties they contain. True, the horns are only *di rinforza*, and can easily be done without; the oboes, too, only combine in sustained chords the notes played *arpeggiando* by the first violins, and only their final rolling figures require preservation. On the other hand, however, the second violins are carried on throughout independently, and the basses, which are strengthened by the viola, require careful consideration. I see no other solution than to sacrifice the dotted rhythm, preserving instead the ascending passage of the second violins which leads up to the *f* of the first violins, and modifying the descent of the second violins by keeping them in the upper octave, so that the final figure of the oboes will follow naturally.

82.

etc.

Bars 25—28 and the corresponding bars 33—36 are easily managed by means of thorough-bass technique, since only the leading of the second violins is thematic;

the basses are to be given in octaves, and the *tremolo* of the first violins and the filling tones are to be brought in as far as possible.

83.

etc.

The first third must of course be omitted from the solo of the two oboes, which introduces a second little theme of a naive character, as the closing chord of the preceding theme requires the $\overset{b}{g}$ an octave higher (as in the third bar of Fig. 83). But the ascending thirds are by no means the theme itself; they only form a kind of link, which begins on $\overset{a}{c}$, so that in reality no loss takes place.

84.



The confirmatory cadences, bars 41—53, which conclude the part, require to be quite freely treated. We omit unwillingly the upward skips of tenths in crotchets, although they bring in no new tones; but it is impossible to preserve more than the quaver-passage which changes between the two violins, beginning a tone higher every bar, the performance of the basses in octaves, and the marking of the principal tones of the viola. The horns, bar 41, can easily be done without, particularly as they cannot join in the sequence:



The image displays two systems of musical notation, each consisting of a treble and a bass staff. The first system features a treble staff with a melodic line of eighth and sixteenth notes, and a bass staff with a rhythmic accompaniment of eighth notes. The second system continues the piece, showing more complex textures with triplets and various rests, ending with the word "etc." to indicate the passage continues.

A complete course of score playing should go through a greater number of scores systematically, and should show, bar by bar, how they could be reduced to a form playable on the piano. The small size of this book, however, compels us to impose limits on ourselves; as we cannot have more than twelve staves on one page, we certainly could not go beyond the orchestra of Beethoven's symphonies. Even of these we could insert only a few short passages, as the print of one single symphony would fill a fair-sized volume. It is, therefore, clear that he who wishes to learn to play from score must procure scores for himself in order to practise his art. The "Introduction" can only give hints and show the way. The difference between scores of fewer or more parts as regards difficulties of reading or arranging is not so great as one might suspect. As we have seen, the string quartet often exceeds, in its polyphonic passages, the limits of piano

technique almost as much as does the full orchestra. On this account, it would not be possible to have a strict method of score-playing, in the form of a prescribed series of complete works, at most an anthology composed of a number of extracts of different works could be recommended. But even to such a collection there is a practical objection; for to fulfil its purpose, it should be of considerable proportions, and, therefore, would be very expensive.

But in this whole subject anything like pedantry is out of place. Under the direction of a competent teacher no harm can be done if a student should try a passage beyond his powers. When there are several pupils in a class, the teacher will naturally arrange so that the beginners may play the easier passages, viz. those of homophonic structure and of few parts, and the more advanced pupils the passages that are difficult on account of their polyphonic character. The thematic parts proper are, as a rule, relatively easy. Even where the composer has ballasted them heavily with counterparts, the theme proper will so absorb the attention that the most inexperienced will strive to do it justice. The usually more figurative bridge passages and the climaxes of the development often combine several thematic motives, and, on that account, may become very difficult to read and absolutely impossible to play. The two examples of Mozart and Richter we have discussed in detail, are by no means easy. Numerous quartets as well as symphonic compositions show a much more simple structure. Our idea was not, indeed, that the novice in score-playing could master these examples without help; we intended rather to show him how to learn to conquer real difficulties.

We repeat, therefore, let there be no pedantry in the selection. The student should acquire a taste for playing through, even out of class-time, any scores he may happen to come across, and thus increase his knowledge and his skill. Should he meet with any special difficulties, he ought to apply to the teacher for advice.

A short example may at least give a fair idea, what a simple kernel is often contained in passages of complicated instrumentation, i. e., in passages in which doublings are freely used, and thus help to overcome to a considerable extent the awe of many-staved scores. I choose the beginning of Beethoven's *F* major Symphony No. VIII.

Allegro vivace e con brio.

86.

Flauti

Oboi

Clarineti
in *B♭*

Fagotti

Corni
in *F*

Trombe
in *F*

Timpani

V. 1^o

V. 2^o

Vla.

Vc.

CB.

The image shows a page of musical notation with ten systems of staves. The notation includes treble and bass clefs, various note values, rests, and dynamic markings. The first system has a treble clef staff with a key signature of one flat and a dynamic marking of *p* (piano) with a first finger fingering (1^0) above it. The second system has a treble clef staff with a dynamic marking of *p dolce* (piano dolce) and a first finger fingering (1^0) above it. The third system has a treble clef staff with a key signature of two sharps and a dynamic marking of *p dolce*. The fourth system has a bass clef staff with a dynamic marking of *p dolce*. The fifth system has a treble clef staff with a dynamic marking of *p dolce*. The sixth system has a treble clef staff. The seventh system has a bass clef staff. The eighth system has a treble clef staff with a key signature of one flat. The ninth system has a bass clef staff with a key signature of one flat. The tenth system has a bass clef staff with a key signature of one flat. The notation is arranged in a standard orchestral format with multiple staves per system.

This musical score consists of 12 staves, organized into three systems of four staves each. The first system (staves 1-4) features a treble clef with a key signature of one flat (B-flat) and a common time signature. The notes are primarily chords and rests, with some eighth notes in the final measure of the second system. The second system (staves 5-8) includes a treble clef with a key signature of one sharp (F#) and a bass clef with a key signature of one flat (B-flat). The notes are mostly chords and rests, with some eighth notes in the final measure of the second system. The third system (staves 9-12) features a treble clef with a key signature of one flat (B-flat) and a bass clef with a key signature of one flat (B-flat). The notes are primarily chords and rests, with some eighth notes in the final measure of the second system. The score is written in a style typical of early 20th-century musical notation, with a focus on harmonic structure and rhythmic patterns.

The musical score is arranged in three systems, each containing four staves. The first system (staves 1-4) is in treble clef with a key signature of one flat and a common time signature. It features a grand staff with two treble staves and two bass staves. The second system (staves 5-8) is also in treble clef with a key signature of one flat and a common time signature, with a grand staff of two treble and two bass staves. The third system (staves 9-12) is in treble clef with a key signature of one flat and a common time signature, with a grand staff of two treble and two bass staves. The music includes various rhythmic patterns, including eighth and sixteenth notes, and rests. There are also some dynamic markings and phrasing slurs.

The musical score is arranged in four systems, each containing three staves. The first system (staves 1-3) is in treble clef with a key signature of one flat and a common time signature. The second system (staves 4-6) is in treble clef with a key signature of one sharp and a common time signature. The third system (staves 7-9) is in treble clef with a key signature of one flat and a common time signature. The fourth system (staves 10-12) is in bass clef with a key signature of one flat and a common time signature. The music includes various rhythmic patterns, including eighth and sixteenth notes, and rests. A trill is marked in the sixth staff. The score concludes with a final measure on each staff.

This musical score is arranged in a grand staff format with multiple systems. The first system consists of four staves: two treble clefs (top two) and two bass clefs (bottom two). The second system also has four staves, with the top two in treble clef and the bottom two in bass clef. The third system features a treble clef on the top staff, a bass clef on the second staff, and two more staves in bass clef. The fourth system has a treble clef on the top staff, a bass clef on the second staff, and two more staves in bass clef. The fifth system has a treble clef on the top staff, a bass clef on the second staff, and two more staves in bass clef. The sixth system has a treble clef on the top staff, a bass clef on the second staff, and two more staves in bass clef. The seventh system has a treble clef on the top staff, a bass clef on the second staff, and two more staves in bass clef. The eighth system has a treble clef on the top staff, a bass clef on the second staff, and two more staves in bass clef. The ninth system has a treble clef on the top staff, a bass clef on the second staff, and two more staves in bass clef. The tenth system has a treble clef on the top staff, a bass clef on the second staff, and two more staves in bass clef. The eleventh system has a treble clef on the top staff, a bass clef on the second staff, and two more staves in bass clef. The twelfth system has a treble clef on the top staff, a bass clef on the second staff, and two more staves in bass clef. The thirteenth system has a treble clef on the top staff, a bass clef on the second staff, and two more staves in bass clef. The fourteenth system has a treble clef on the top staff, a bass clef on the second staff, and two more staves in bass clef. The fifteenth system has a treble clef on the top staff, a bass clef on the second staff, and two more staves in bass clef. The sixteenth system has a treble clef on the top staff, a bass clef on the second staff, and two more staves in bass clef. The seventeenth system has a treble clef on the top staff, a bass clef on the second staff, and two more staves in bass clef. The eighteenth system has a treble clef on the top staff, a bass clef on the second staff, and two more staves in bass clef. The nineteenth system has a treble clef on the top staff, a bass clef on the second staff, and two more staves in bass clef. The twentieth system has a treble clef on the top staff, a bass clef on the second staff, and two more staves in bass clef. The score includes various musical notations such as notes, rests, slurs, and dynamic markings. A trill is explicitly marked with 'tr' and a wavy line in the sixth system. The key signature changes from one flat to one sharp and back to one flat. The time signature is 3/4.

The musical score on page 107 consists of several systems of staves. The first system includes four staves: the top two are in treble clef with a key signature of one flat, and the bottom two are in bass clef with a key signature of one flat. The first staff has a dynamic marking of *a 2* and features a melodic line with slurs. The second staff has a similar melodic line. The third staff is in treble clef with a key signature of one sharp and contains a sustained chord. The fourth staff is in bass clef with a key signature of one flat and contains a sustained chord. The second system includes four staves: the top two are in treble clef with a key signature of one flat, and the bottom two are in bass clef with a key signature of one flat. The first staff has a dynamic marking of *a 2*. The second staff has a dynamic marking of *tr* and features a melodic line with slurs. The third staff is in treble clef with a key signature of one flat and contains a sustained chord. The fourth staff is in bass clef with a key signature of one flat and contains a sustained chord. The third system includes four staves: the top two are in treble clef with a key signature of one flat, and the bottom two are in bass clef with a key signature of one flat. The first staff has a melodic line with slurs. The second staff has a melodic line with slurs. The third staff is in treble clef with a key signature of one flat and contains a sustained chord. The fourth staff is in bass clef with a key signature of one flat and contains a sustained chord. The fourth system includes four staves: the top two are in treble clef with a key signature of one flat, and the bottom two are in bass clef with a key signature of one flat. The first staff has a melodic line with slurs. The second staff has a melodic line with slurs. The third staff is in treble clef with a key signature of one flat and contains a sustained chord. The fourth staff is in bass clef with a key signature of one flat and contains a sustained chord.

The pupil can easily find out how this is strengthened by the addition of upper and lower octaves. The holding of the *c* in the middle, while the two groups of parts moving in thirds are separating, adds a 5th part (kettle-drums, horns, trumpets, 2nd flute). An arrangement on the piano must not, of course, choose this middle position for all the voices, all the less as the orchestra does not represent the melody in this position at all, but it will play the melody in the position of the 1st violin, and the basses likewise as noted. This makes it necessary to join any harmonic filling to the melody. Even the thirds that double the bass (bars 3—4) had better be played, as well as possible, by the right hand, lest the octaves of the basses should have to be sacrificed. To add them in double-bass position is altogether unfeasible.

The after-section, assigned to a wind quartet, had better be played strictly in four parts, that is to say we ought to ignore the 1st oboe, which mixes up the two upper parts, considering it, like the 2nd oboe and 1st flute, as merely strengthening. The entry of the horns (in octaves with the bassoons) is to be marked merely by striking the chord again. We shall play, therefore, thus:

88.

f

dolce

(8)

The repetition of the after-section by the *tutti* is to be managed again after the manner of thorough-bass playing, that is by conserving the melody (1st and 2nd violins in octaves) and the basses:

89.

f (8 a = 2)

pizz f (4) (4 a)

(8 = 2)

The image shows a musical score for two staves. The top staff is in Treble clef and the bottom staff is in Bass clef. The top staff begins with a dynamic marking of *sf* (sforzando) and has the letters "NB." written below it. The bottom staff has "NB." and "etc." written below it. The music consists of rhythmic patterns with slurs and accents, typical of a drum roll or a specific orchestral effect.

Bars 12—20 can scarcely be played differently from bars 20—30, although the score, in the latter ten bars, presents quite a different appearance in the wind instruments. Merely and solely the drum roll might be taken account of (ex. 89 at NB.), but for the rest the heavier instrumentation could at most be suggested by a stronger touch (*più f*).

A few bars each from the *Allegretto scherzando* and the Menuet of the same symphony may form the conclusion. In the *Allegretto* the prevailing *staccato p* semi-quaver chords are only a kind of background from which the thematic formations of the strings stand out — almost the direct opposite of the usual practice, which makes the wind make such designs on a ground of strings.

Allegretto scherzando.

90.

Oboi

Clarineti in B \flat

Fagotti

Corni in B \flat basso

V. 1 $^{\circ}$

V. 2 $^{\circ}$

Vla.

Vc. e CB.

pp

pp

pp

pp

pp

pizz. pp

The musical score is for measures 90, 91, and 92. It features seven staves: Oboi, Clarineti in B \flat , Fagotti, Corni in B \flat basso, V. 1 $^{\circ}$, V. 2 $^{\circ}$, and Vla. The bottom two staves (Vc. e CB.) are grouped together. The key signature is B \flat major (two flats), and the time signature is 2/4. The Oboe, Clarinet, and Bassoon parts play a rhythmic pattern of eighth notes in pairs, starting in measure 90. The Horns play a similar pattern. The Violin I part has a few notes in measure 92. The Violin II part is silent in measure 90 and 91, then plays a pizzicato note in measure 92. The Viola part is silent throughout. The Violoncello and Contrabass parts are silent throughout. Dynamics include *pp* (pianissimo) and *pizz. pp* (pizzicato pianissimo). A vertical dashed line is placed between measures 91 and 92.

The musical score consists of eight staves. The first three staves are grouped by a brace on the left and contain dense, rhythmic chordal patterns. The fourth staff continues this texture. The fifth and sixth staves show a more melodic line with some rests. The seventh staff is marked *pizz.* and *pp*, featuring sparse notes. The eighth staff, also marked *pp*, contains a rhythmic accompaniment.

Here the wind chords are at first played in full, as they are noted, but at the entry of the theme as much of this is left out as is desirable for a clear rendering of

The image shows a musical score for piano, consisting of seven staves. The first four staves are grouped by a brace on the left and contain dense chordal textures. The fifth staff has a treble clef and contains sparse notes. The sixth and seventh staves have bass clefs and contain sparse notes. A vertical dotted line is placed between the fourth and fifth staves, indicating a measure boundary. The key signature is one flat (B-flat), and the time signature is 3/4.

the thematic formations. Again, during the rising of the basses, we confine ourselves, while preserving the limits above, to what one hand can conveniently play:

91.

Similarly we have to deal with the whole movement and, generally, with all passages of a like character.

The beginning of the *Tempo di Menuetto* brings first a thick-threaded *Unisono* of the strings (without double-bass) and the bassoons, which divides itself in the 2nd bar. In the 3rd bar the powerful theme emerges, scored thinly at first, but fully in the after-section. The horns, trumpets, and kettle-drums are merely *di rinforza*, but still can be brought out to a certain extent. In the after-section the flutes, doubling the *c-f* of the horns and trumpets, rise to the upper octave of the violins. This, however, must not mislead us into playing the melody, which already proceeds in octaves, in this high position.

Tempo di Menuetto.

92.

a 2

Fagotti

Corni in *F*

Trombe in *F*

Timpani

V. 1^o

V. 2^o

Vla.

Vc.

CB.

sf sf sf sf sf sf

p

f sf sf sf sf sf sf

p

sf sf sf sf sf sf

f sf sf sf sf sf sf

sf sf sf sf sf sf

f sf sf sf sf sf sf

sf sf sf sf sf sf

f sf sf sf sf sf sf

p

sf sf sf sf sf sf

f sf sf sf sf sf sf

p

cresc.

f

f

f

cresc.

f

cresc.

f

cresc.

f

cresc.

f

cresc.

f

Flauti

Oboi

Clarinetti in B \flat

f *sf*

f *sf*

f *sf*

sf

sf *sf*

sf *sf*

a2

This musical score is for a section of an orchestra, specifically focusing on woodwinds and strings. It is divided into several systems. The first system includes parts for Flauti (Flutes), Oboi (Oboes), and Clarinetti in B \flat (Clarinets in B-flat). The Flute and Oboe parts are marked with *f* (forte) and *sf* (sforzando) dynamics. The Clarinet part is marked with *f* and *sf*. The second system shows the beginning of the string section, with the first three staves (Violins I, Violins II, and Violas) marked with *sf*. The third system continues the string parts, with the first two staves (Violins I and II) marked with *sf*. The fourth system shows the lower string parts (Violoncelli and Contrabassi) with a *a2* marking above the first staff. The score is written in a key signature of one flat (B-flat major or F minor) and a 2/4 time signature. The notation includes various rhythmic values, slurs, and dynamic markings throughout.

Here again further remarks for the piano arrangement are scarcely needed. At first we keep strictly to the notation. But as the instrumentation is gradually strengthened, we change more and more to a thorough-bass-like treatment of the filling parts, leaving the basses and the melody as much as possible in their positions. Peculiarities in the harmonic writing, such as the omission of the third in bars 3 and 7, one will like to preserve. Otherwise, however, any pedantry is quite out of place, and the changed conditions of performance lead rightly to altered details.

93.

The musical score is written for piano in 3/4 time, B-flat major. It consists of three systems of two staves each (treble and bass clef). The first system starts with a forte (*f*) dynamic and ends with a piano (*p*) dynamic. The second system includes a *cresc.* (crescendo) marking. The third system continues the piece with various dynamics and articulations.

Thus we conclude this little Introduction. Its leading point of view has been, as we emphasised repeatedly, how to represent an *ensemble* on the piano for the purpose of getting assistance from the living tone effect while reading a score. If another object is aimed at, for instance the most complete possible reproduction of a score for listeners who do not read the score, much more satisfactory results will be attained by having a second player, or, better still, a second piano. If two pianos are used, it is well to assign to one the strings, to the other the wind instruments, so that, in the *tutti*, real doublings in unison are effected. When two players are at the same piano, such a division of the rôles is, of course, impossible, as the one will be confined to the bass, the other, to the treble. For modern scores that freely use figurative elements and complicated combinations of themes, this kind of score playing is much to be recommended. But it requires two very good players who have heart and head in the right place and are fruitful in expedients. Such, however, have outgrown the beginner's stage for which this booklet is intended.

